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<b>(54) Title:</b> SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT  <b>(57) Abstract</b>  Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

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**SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION  
PRODUCT**

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**Technical Field**

The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

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**Background**

This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

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in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. The nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types of molecules are referred to generally herein as polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the message (anticodon). The term codon is also used for the corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an

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enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries all the information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second strand. The linear DNA molecules in chromosomes have thousands of genes distributed along their length. Chromosomes include both coding regions (coding for polypeptides) and noncoding regions; the coding regions represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions.

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respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, an uninterrupted polypeptide-coding sequence, and a 3' untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. The untranslated regions typically have many, randomly-distributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. The 5'-untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

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The ability of one strand of DNA to attach or hybridize to a complementary strand has already been exploited for several purposes. For example, small pieces of DNA (15 to 25 base pairs long) can be made which will hybridize to longer strands of DNA which have a complementary sequence. These short "primers" can be selected such that they hybridize to a specific, unique location on the longer strand. Once the primers have hybridized to their target on the DNA, the polymerase chain reaction (PCR) can be employed to generate millions of copies of (or amplify) the particular segment of DNA between the locations to which two primers are bound. Briefly, this technique allows amplification of a DNA region situated between two convergent primers, using oligonucleotide primers that hybridize to opposite strands. Primer extension proceeds inward across the region between the two primers, and the product of DNA synthesis of one primer serves as a template for the other primer. Repeated cycles of DNA denaturation, annealing of primers, and extension result in an exponential increase in the number of copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can be hybridized to a longer DNA sequence, such as a chromosome, to mark a specific location on the longer sequence. Segments of DNA 50 bases long or longer that hybridize to a unique DNA location in the human genome are extremely unlikely to hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all human DNA (the human genome). The human genome is estimated to comprise 50,000 - 100,000 genes, up to 30,000 of which might be expressed in the brain (Sutcliffe, *Ann. Rev. Neurosci.* 11:157 (1988)). Once dedicated human chromosome sequencing begins in three to five years, it was expected that 12-15 years will be required to complete the sequence of the genome (Report of the Ad Hoc Program Advisory Committee on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed. (NIH, Bethesda, Md, 1988)). At that rate, the majority of

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human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. The coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total DNA. In contrast, cDNA (which is only made from the transcription product of active genes) is one-half to three-fourths (the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

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corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., *Nature* 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

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regions and coding regions of chromosomes is of significant interest. There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

#### SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed *in vivo*. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for



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mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSS) (Olson et al., *Science* 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

#### BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

#### DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

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examples are provided to demonstrate and exemplify numerous aspects of the invention.

#### I. ESTs from cDNA Libraries

5           The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. In general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously  
10       randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone selection. According to the present method, ESTs are generated from partial DNA sequencing of the selected clones.  
15       The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing reaction. While single sequencing reactions may have an accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR  
20       primers.

          Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few  
25       specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method  
30       called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

          Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome  
35       (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express

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the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. Exon amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been mapped. The exon amplification method can be used directly with the cosmid and YAC clones from human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, EST-derived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

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long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known  $\beta$ -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

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desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction, which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., *Nucl. Acids Res.* 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately equal proportions in the library (Patanjali et al, *Proc. Natl. Acad. Sci. USA* 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

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sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

## II. Complete Coding Sequences from ESTs

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. Suitably stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

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of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.

2. Radiolabel the isolated insert DNA, e.g., with <sup>32</sup>P labels, preferably by nick translation or random primer labeling.

3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

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4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.

5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full  
10 length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript,  
15 followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

20 ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with  $P^{32}$  using polynucleotide kinase using labelling methods known to those with skill in the art (**Basic Methods in Molecular Biology**, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The  
25 lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing  
30 the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The  
35 ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust



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the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R., Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., *Methods*: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

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Gocayne, J.D., Ward, D.C., and Venter, J.C. *Genomics* 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, the polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. The sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the specific polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).

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The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). The conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately  $10^6$ -fold purification of the native message. Purification of starting material or

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natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

5 In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This  
10 can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be  
15 used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences.  
20 Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in  
25 addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs (and corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of  
30 this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

### III. DNA Constructs

35 The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

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a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example.

Bacterial: pBs, phagescript,  $\phi$ X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).  
Eukaryotic: pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

Promoter regions can be selected from any desired gene using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P<sub>R</sub>, and trc. Eukaryotic promoters include CMV immediate early, HSV thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., **Basic Methods in Molecular Biology**, (1986)).

The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

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can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

#### IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

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Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTs have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

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Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., **Human Chromosomes: a Manual of Basic Techniques**. Pergamon Press, New York (1988).

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, **Mendelian Inheritance in Man** (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then



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the mutation is likely to be the causative agent of the disease.

With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, *Nucl. Acids Res.* 6: 3073 (1979); Cooney et al, *Science* 241: 456 (1988); and Dervan et al, *Science* 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, *J. Neurochem.* 56: 560 (1991); *Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression*, CRC Press, Boca Raton, FL (1988)). Triple helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the present invention is necessary for the design of an antisense or triple helix oligonucleotide.

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The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect.   
5 high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals   
10 from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on   
15 a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional   
20 DNA markers for RFLP.

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the   
25 actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST.   
30 These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA   
35 sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to

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obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

5 The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared for identification purposes. Because greater numbers of polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

25 If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

30 Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ $\alpha$  class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ $\alpha$  class II HLA gene.

5       The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. Those sequences targeted to noncoding regions (see, e.g., Tables 8  
10       and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of  
15       the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

      There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for  
20       example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or  
25       by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

#### V. Production of Polypeptide Corresponding to ESTs

      As previously explained, each EST corresponds not only  
30       to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

      At the simplest level, the amino acid sequence encoded  
35       by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

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particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

Alternatively, the DNA encoding the desired polypeptide  
5 can be inserted into a host organism and expressed. The organism can be a bacterium, yeast, cell line, or multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA)  
10 can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., *Science* 247:1465 (1990); Felgner, et al., *Nature* 349:351 (1991).  
15 Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

20 Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will  
25 then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide.  
30 Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

## VI. Examples

35 Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

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## EXAMPLE 1

cDNA Sequences Determined by Random  
Clone Selection: First set

5

## METHODOLOGY:

With reference to the data presented in Table 1, lambda ZAP libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below). In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1.

Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5  $\mu$ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5  $\mu$ M each dNTP, and 0.1  $\mu$ M each primer for 35 cycles: 94°C, 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

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universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, *Nature* 347: 310 (1990) hereby incorporated by reference).

#### RESULTS:

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, *Neurochem.* 48: 307 (1987); Fargnoli et al, *Anal. Biochem.* 187: 364 (1990); Duguid and Dinauer, *Nucl. Acids. Res.* 18: 2789 (1990); Schweinfest, et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Travis and Sutcliffe, *Proc. Natl. Acad. Sci. USA* 85: 1696 (1988); Kato, *Eur. J. Neurosci.* 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Sive and St. John, *Nucl. Acids Res.* 16: 10937

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(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOS 1-315.



TABLE 1. cDNA Library Composition Determined  
By Random Clone Sequencing

EST Category	Hippocampus		Hippocampus Subtracted		Fetal Brain		Temporal Cortex	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Databases Match--Human								
Mitochondrial Genes	48	12.8	10	8.6	3	7.9	6	7.5
Repeats: Alu, Line-1, etc.	39	10.4	14	12.2	6	15.8	0	0
Ribosomal RNA	10	2.7	7	6.0	0	0	11	13.8
Other Nuclear Genes	32	8.6	7	6.0	4	10.5	0	0
Database Match--Other	32	8.6	7	6.0	5	13.2	4	5.0
No Database Match	160	42.8	44	37.9	20	52.6	6	7.5
poly A Insert	53	14.1	24	20.7	0	0	27	33.7
No Insert	1	0.3	3	2.6	0	0	26	32.5

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## EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. *Science*, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. *Nucl. Acids Res.* 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al *Science* 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. *Science*

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216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. *Nature* 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. *Biochem. Biophys. Acta* 910: 203-212 (1987))

5 were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. *Mol. Biol.* 215: 403-410 (1990)) server at the National Center for

10 Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and

15 the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene family identification (Barker, W., George, D., Hunt, L., & Garavelli, J. *Nucl. Acids Res.* 19 (Suppl): 2231-2236 (1991))

20 for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and

25 assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. ATCC accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base

30 expressed D-segment numbers for these clones are D0S1E - D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOs 316-2407.

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## EXAMPLE 3

EST Characterization: First Set

ESTs including SEQ ID NOS 1-315 were analyzed as follows. Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. *Comput. Appl. Biosci.* 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide (BLASTX) comparisons (Altschul et al, *J. Mol. Biol.* 215: 403 (1990)). PIR searches were run on the National Center for Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Pegarson and Lipman, *Proc. Natl. Acad. Sci. USA*, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

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After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase  $F_0\beta$ -subunit and porcine aconitase were also found (Table 2). Brain-specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. At least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide 3'-phosphodiesterase (2 ESTs), calmodulin, c-erbA- $\alpha$ -2,  $G_s\alpha$ , and  $Na^+/K^+$  ATPase  $\alpha$ -subunit. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

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fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight  
5 ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

10 ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the database. Some patterns, particularly the "leucine zipper",  
15 are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes,  
20 including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and Drosophila (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved  
25 in organelle transport in the squid giant axon (Vale et al, Cell 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102)  
30 matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an S. cerevisiae RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270  
35 matched the three  $\beta$ -tubulin genes with 88-91% identity and

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EST00271 (SEQ ID NO:248) matched  $\alpha$ -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the *Drosophila* genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the *Drosophila* genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing *Drosophila* embryo (Campos-Ortega, **Trends in Neuro. Sci.** 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. **J. Mol. Biol.** 215: 403 (1990)). EST00256 (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein  $\beta$  subunit- and yeast cdc4-like elements (Hartley et al, **Cell** 55: 785 (1988); Klambt et al. **EMBO J.** 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the *Xenopus* Notch homolog, Xotch. In *Drosophila*, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, **Neuron** 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST:  $\beta$ -

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actin (3),  $\lambda$ -actin (2),  $\alpha$ -tubulin (2),  $\alpha$ -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

#### Example 4

##### EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOs 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as *E. coli*, yeast, *C. elegans*, *Drosophila*, barley, *Arabidopsis*, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., *supra*), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in *Drosophila* are represented by similar human ESTs, including seven in *absentia* (Carthew, R. & Rubin, G. *Cell* 63: 561-577 (1990)),



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big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. *Nature* 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. *Cell* 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. *Genes. Dev.* 4: 1516-1527 (1990)). New members of gene families previously known in humans include a  $\text{Ca}^{+2}$ -transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. *Proc. Natl. Acad. Sci. USA* 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

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Table 2: ESTs Identified by Database Matches

SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID
208	EST00250	60K filarial antigen	A28209	PIR	108	56.9
2320	EST01784	60K filarial antigen	A28209	PIR	88	50.6
969	EST01982	ADP-ribosylation factor 1	B33283	PIR	84	41.2
1834	EST01620	AMP deaminase, brain	A37056	PIR	57	100.0
97	EST00289	Aconitase	A35544	PIR	105	90.6
251	EST00370	Actin, other	S10021	PIR	44	51.1
248	EST00271	Actinin, alpha	HUMACTAR	GB	271	85.3
891	EST01891	Actinin, alpha	HUMACTAR	GB	315	81.6
1500	EST02538	Actinin, alpha	HUMACTAR	GB	271	75.0
132	EST00110	Agrin	RATAGR	GB	269	82.2
1852	EST01625	Agrin	RATAGR	GB	103	84.6
1094	EST02113	Ala	HUMALA	GB	92	82.8
691	EST00675	Alcohol dehydrogenase	RICGOS2G_1	GPU	38	59.0
2408	EST00244	Amyloid A4	HUMAFPA4	GB	135	91.9
1965	EST01664	Amyloid A4	A29030	PIR	52	54.7
2068	EST01694	Amyloid A4	QRHUA4	PIR	83	69.0
2092	EST01700	Anion exchanger homolog AE3	A33638	PIR	95	97.9
1880	EST01634	Axonal glycoprotein TAG-1	A34695	PIR	69	87.1
1492	EST02530	B cell-specific Mo-MLV integration site 1 (bmi-1)	MUSBMI1A	GB	111	87.5
1277	EST02306	Bib protein	S09699	PIR	57	53.4
13	EST00255	Cadherins	CADN\$HUMAN	SP	41	45.2
1348	EST02378	cAMP-dependent protein kinase inhibitor	MUSPKI	GB	234	91.5
1931	EST01041	cAMP-regulated phosphoprotein	B35308	PIR	21	86.4
1413	EST02447	cAMP-specific phosphodiesterase	HUMPDEAA	GB	363	69.0
396	EST01443	CDPdiacylglycerol-serine O-phosphatidyltransferase	JH0368	PIR	33	41.2
1956	EST01663	Ca2+-transporting ATPase 2	B28065	PIR	125	88.9
1126	EST02146	Calbindin D28	RATCALBD28	GB	81	87.8
1039	EST02055	Calcium channel	S05054	PIR	33	67.6
1910	EST01645	Calmodulin	RATRCM1	GB	120	90.1
485	EST01466	Calmodulin-dependent protein kinase, type II, beta	A26464	PIR	93	98.9
913	EST01913	Clathrin coat assembly protein AP50 homolog	YSCYAP54_1	GPU	62	63.5
2004	EST01676	Cofilin	PIGCOFIL	GB	132	89.5
2400	EST01824	Cysteine-rich intestinal protein	GYRTI	PIR	56	66.7
1588	EST02633	D22Z3 repetitive DNA	HUMREP	GB	160	76.4
2192	EST01257	Diacylglycerol kinase, lymphocyte	S09156	PIR	44	42.2
1441	EST02477	Diamine acetyltransferase	ATDASHUMAN	SP	74	45.3
650	EST00642	Dilute (myosin heavy chain)	MUSDILUTE_1	GPU	27	100.0
2302	EST01779	Discs-large tumor suppressor	DRODLGA_1	GPU	53	63.0
188	EST00256	Enhancer of split	A30047	PIR	86	58.6
2289	EST01325	Fatty acid synthase	RATFAS	GB	98	79.8
310	EST00377	Fo ATPase beta subunit, mitochondrial	BOVMTASB	GB	293	85.4
1332	EST02362	GA binding protein, beta subunit	MUSGAC_1	GPU	86	90.8
1667	EST00825	Gamma-aminobutyric acid transporter	A35918	PIR	26	59.3
2217	EST01738	Gelation factor ABP-280	A37098	PIR	74	80.0
1412	EST02446	Glutamate-aspartate carrier protein	JV0092	PIR	57	37.9
1020	EST02034	Glutaminase	GLSS\$RAT	SP	34	74.3
1885	EST01639	Histocompatibility antigen modifier 1	A37779	PIR	63	75.0
1495	EST02533	Hypothetical 43.5K protein	JU0319	PIR	43	52.3
2326	EST01791	Inositol-1,4,5-trisphosphate 3-kinase	JN0129	PIR	65	68.2
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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724	EST01529	Interferon-induced 54K protein	INI4\$HUMAN	SP	76	70.1
1035	EST02051	J1 protein	MUSJ1PRO	GB	362	85.7
1229	EST02258	KUP protein	HUMKUPMR_1	GPU	54	36.4
993	EST02007	Kinase 5 protein	CHKCEK5_1	GPU	68	94.2
77	EST00257	Kinesin	A35075	PIR	57	86.2
78	EST00258	Kinesin	A35075	PIR	62	47.6
2245	EST01748	Kinesin	A35075	PIR	98	52.5
2282	EST01764	Lamin B receptor	A36427	PIR	76	71.4
2173	EST01724	Lon protease	JQ0901	PIR	103	41.3
1427	EST02463	Long-chain-fatty-acid-CoA ligase	A36275	PIR	36	62.2
313	EST00276	Lysosomal membrane glycoprotein 1 (LAMP-1)	A31959	PIR	53	46.3
161	EST00247	MARCKS (myristoylated alanine-rich protein kinase	BOVMARCKS	GB	139	83.6
1386	EST02418	MARCKS homolog	MMF52	EU	237	92.4
769	EST00734	MARCKS homolog	S08341	PIR	61	40.3
43	EST00371	Maternal G10 protein	S05955	PIR	38	92.3
1468	EST02505	Matrin 3	RATMATRIN3	GB	137	93.5
639	EST00632	Membrane transport superfamily (GTP-dependent)	A24400	PIR	63	39.1
1894	EST01643	Membrane transport superfamily (GTP-dependent)	A24400	PIR	71	50.0
824	EST01865	Microtubule-associated protein 1B	RATNEU	GB	293	86.4
223	EST00368	Microtubule-associated protein 1B	A33645	PIR	30	54.8
2032	EST01683	Microtubule-associated protein 1B	A33645	PIR	49	62.0
2017	EST01678	Milk fat globule membrane protein	A36479	PIR	48	61.2
1704	EST01580	Myeloid differentiation primary response gene MyD1	MUSMYD118_1	GPU	76	88.3
2226	EST01744	NAD(P)+ transhydrogenase (B-specific)	DEBOXM	PIR	86	93.1
1567	EST02610	Neural cell adhesion molecule L1	S05479	PIR	82	43.4
506	EST01471	Neuraxin	S06017	PIR	120	84.3
1566	EST02609	Neutrophil oxidase factor	A34855	PIR	43	47.7
952	EST01961	Notch/Xotch	HUMTAN1_1	GPU	85	57.0
227	EST00259	Notch/Xotch	A35844	PIR	74	85.3
1395	EST02429	Nuclear factor 1-like protein (NF1)	HAMNF1A	GB	111	92.0
1681	EST01573	Nucleoside diphosphate kinase	A33386	PIR	71	52.8
346	EST01828	Otd homeotic protein	A35912	PIR	35	52.8
2254	EST01751	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase	A28807	PIR	40	90.2
1869	EST00992	Polymyxin B resistance	A32714	PIR	20	76.2
93	EST00287	Processing enhancing protein	S03968	PIR	96	58.8
2353	EST01806	Prohibitin	RATPROHIB_1	GPU	120	97.5
2297	EST01775	Prohormone cleavage enzyme	MUSMPC1A_1	GPU	91	93.5
9	EST00376	Prolyl endopeptidase	PIGPREP	GB	223	83.9
1069	EST02087	Protein kinase C, zeta	HUMPKCL	GB	382	58.7
1933	EST01650	Protein phosphatase 2A beta subunit	HUMPROP2AB	GB	288	76.8
202	EST00298	Protein-tyrosine phosphatase LRP	LRP\$MOUSE	SP	62	44.4
1654	EST01572	Protochlorophyllide reductase	S04783	PIR	34	57.1
38	EST00374	RNA polymerase II 6th subunit (RPO26)	A36352	PIR	72	75.3
1478	EST02515	Rab5	F34323	PIR	91	82.6
2368	EST01389	Radial spoke protein 3	S05962	PIR	58	52.5
37	EST00038	ras p21-like small GTP-binding protein (smg GDS)	BOVSMGGDS	GB	131	89.4
180	EST00299	ras-related proteins	S10493	PIR	51	46.1
1700	EST01579	Retrovirus-related gag polyprotein	FOHUE2	PIR	95	77.1
1511	EST02550	Retrovirus-related pol polyprotein	GNIJGL	PIR	50	54.9
102	EST00248	rho H12/ ARH12	BOVBGBRH	GB	195	79.6
1715	EST01583	Ribosomal protein L18a	R5RT18	PIR	68	95.7
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

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1856	EST01627	Ribosomal protein L1a	A24579	PIR	75	63.1
1974	EST01667	Ribosomal protein L3	JQ0771	PIR	74	80.0
301	EST00300	Ribosomal protein L30	R6RT30	PIR	57	96.5
22	EST00301	Ribosomal protein S10	R3RT10	PIR	66	97.0
2402	EST01826	Ribosomal protein S10	RJYM10	PIR	36	51.4
463	EST01459	Ribosomal protein YL10	S11581	PIR	40	68.3
1408	EST02442	Seven in absentia	A36195	PIR	46	80.8
299	EST00249	smg p25A GDP dissociation inhibitor	A35652	PIR	97	77.5
951	EST01960	Spectrin, beta	HUMSPTB	GB	268	67.7
2089	EST01699	Sperm membrane protein	A35981	PIR	52	58.5
2073	EST01697	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	44	100.0
2138	EST01715	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	49	92.0
430	EST00472	Synaptotagmin (p65)	SY65\$HUMAN	SP	27	53.6
1371	EST02402	Talin	MUSTALINR_1	GPU	79	81.2
1771	EST01601	Thiosulfate sulfurtransferase (rhodanese)	ROBO	PIR	65	81.8
300	EST00232	Transforming protein (db1)	TVHUD8	PIR	25	65.4
189	EST00282	trkB	A35104	PIR	33	67.6
653	EST01512	Tubulin, alpha	HUMTUBAG	GB	223	75.0
594	EST01490	Tubulin, beta	HUMTBB5	GB	298	93.6
757	EST01542	Tubulin, beta	HUMTUBBM	GB	217	90.4
1245	EST02274	Tubulin, beta	A26561	PIR	105	88.7
1147	EST02169	Tyrosine kinase	HUMECK	GB	384	74.3
1701	EST00853	Unc-104	JN0114	NR	36	45.0
2121	EST01711	Valine-tRNA ligase	A29871	PIR	56	57.9
187	EST00152	Wilm's tumor-related protein	HUMQM	GB	228	99.6
1726	EST01588	XPR2 alkaline extracellular protease	B26955	PIR	88	46.1
249	EST00275	Zinc Finger Proteins	S06551	PIR	25	57.7
413	EST01446	Zinc Finger Proteins	S00754	PIR	45	60.9
469	EST01460	Zinc Finger Proteins	C32891	PIR	34	54.3
833	EST01560	Zinc Finger Proteins	S00754	PIR	105	67.0
1230	EST02259	Zinc finger proteins	S00754	PIR	71	62.5
1496	EST02534	Zinc finger proteins	A34612	PIR	50	45.1
2324	EST01352	Zinc Finger Proteins	S10397	PIR	29	56.7

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There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the  $\beta$ -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. *Proc. Natl. Acad. Sci., USA* 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both a- and alpha-tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P., Ervin, S., Applegren, N., Wiest, L. & Pegg, A. *J. Biol. Chem.* 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. *Genomics* 7:491-502 (1990)).

#### EXAMPLE 5

##### Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOS. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

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sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology: Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

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these regions are less likely to prime other members of a gene family or pseudogenes.

The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCi of a <sup>32</sup>P-labeled deoxycytidine triphosphate. The PCR was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., *Genomics* 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

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The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.



Table 3: Assignment of ESTs to Chromosomes by PCR

SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	1	CTGTTTGCAGTTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	1	GCCATTGTGCTGAATAGAGT	GTTAGTGTTCCTTAGCAAG
83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	1	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTAGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	1	CCTAATCACCTCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	1	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	1	TTAGAAGTGCCCATGGGAGG	TTTTAAGGCTCTGGAGTGT
141	EST00118	1	CTCAGAGAACTTAGGTGAA	CTACAGAATCATTTCCACCAG
220	EST00372	1	AAGTTGCACATTGCCCAAGG	ATAGTACTGCAAGGTTATTC
237	EST00187	1	TTACAAATTTCTCTTGACGC	CTGAAGGAGCACAGTTTCTC
242	EST00192	1	GGATCAGATAATCAAACAGG	GCCTTAGGATATGAATGCATA
259	EST00202	1	GCATCACAGTTTAACTGAGG	CTACATATTTGTGCCTCCCT
269	EST00293	1	CTGTTGCTGTGCAGTAGCTT	CTTTTGACCCAGTGAAAGCT
299	EST00249	1	GATCATGCAGACGTAGATAT	CCAACCTCTGCCAGATCATT
1651	EST00810	1	TAGTCGCTGTAAGTTGATT	GCCTTGCTGGATGCTTCATT
16	EST00021	2	CAGGCAAGTTTCTTCCAGGA	TCAGACCCATGGTCAGCTT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	CCCTCAGCTTAGGGGAATG
8	EST00234	2	TAGAAGGCAAACTATGTCCC	GGTTGAGGATTGGCTTTTAC
36	EST00037	2	AGCCAGAAGGCTGCTTAAAG	GCAGTGAACCAGTACTCCTA
123	EST00106	2	GTCTAATTTGTAACCTTCAG	GATAGATTGTATAAGAAGCC
192	EST00155	2	GATTTATGTCTGGGAAGTAA	GCAGCATGTGAAAGAAATGAT
200	EST00162	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
284	EST00216	2	CCTAAGAATTCGTTTGGCTC	GTCTGGCACATAATAGATTG
102	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTC
167	EST00138	3	AAACAGCTGCGGATGACA	AAAGGATCCTCCACTCCAGA
12	EST00274	3	CCTAGCAAACCTCATAACAC	CATAAGTGAATGGACACAGG
60	EST00062	3	ACACATTAACGGTGCTGCAG	GGAATCAGCCCTTGAGGACT
77	EST00257	3	AAGCTCACAACGCAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093	3	ATTGAACTCTGTCAACAGTG	TGTAACAAAGGCCAAACT
108	EST00094	3	AL2 - GCAGGATGTGAGTCTTTGAG	AGCACACATTATCTACCACGGC
1706	EST00857	3	AL2 - GCAGGATGTGAGTCTTTGAG	CCAGCACACATTATCTACCACG
37	EST00038	4	AACTTCGCAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
6	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
37	EST00038	4	AL2 - GGAAGTACAGGATTTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGCTAGTATCATCC
59	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAAGAATC
74	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGACAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAGAAGGTATG
1643	EST00803	5	GAGCGTTTTAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2 - TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2 - CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAAGG

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SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
1	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTGCTACAATCTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCTCAAACACTGCT
288	EST00219	6	ACTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTAACTGTTGA	TGAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2-ACCCAGTTCTCAAAGACC	GGTTTACCATTTCAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTCAGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTGAGAATTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAAG	CTTAATCATGGATTCTTCGT
1680	EST00838	7	AL2-GTTCTTTCCAGGTATGC	TTGTTGTTACTGAGGAAGTGCG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
134	EST00375	9	TCTGGGCTTCTGTGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTGACGA	TTCCAGTGCCCCCTTTTGTC
1645	EST00804	10	CTCCTTTGGGACAACAACCT	CCAACCCAAACATATTCTA
20	EST00024	10	AGCTGTTCCCTGAGAGATGCA	CCTTGTGAAGAAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACTTTGG	CTAAGCATCTGCATGTCCAG
172	EST00142	10	TACTAGCATTCTTACTCTC	TATGCTGATTGTTTGCACTC
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAACCTCTGTAGTGTCTAAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTC	TAGGGCCACCTCCAGTTCAT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTTCTGG
126	EST00109	11	AL2-CTAACCACAACCCACACATTG	CCTCAGCACAAGAGAAGATGG
7	EST00014	12	AACTTGCAACATAAACTAG	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCTCTCTGGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAAGTCTAGT
1664	EST00822	14	GGGTCAGAATTAAGAGGTCT	GTTTCATCTCTAACTCCTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTT	GTCTAGCTAGTAACTTACAC
1689	EST00845	14	AL2-AGGAGGAAGCTGAAATCC	GGAAAGTCCATAAGAGACTCACC
95	EST00088	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACTCT
33	EST00034	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
247	EST00279	16	TGGCTAGGGCAGGCCTTAA	GAGAAGAATATCAAATGGGG
18	EST00373	16	CCATCTGTGTCCCAATTAAGC	AGGGAAGAAGTCTAGAGCGA
68	EST00068	17	CAAAGACGGGAGACGAATGA	AGTGGAACGCGTGGCCTATG
1652	EST00811	17	GAGCTGCATGTTGATAAGTA	TTGACTTAAGCTGACCTTAA
1702	EST00854	17	AL2-TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00080	19	AGAGATGTCAGTCCATTATC	CTATTCCACCTTACTCAAGG
223	EST00368	19	CATCATGTGCGAGACGCATT	TGGATGACCTGAGTCTGCAG
21	EST00025	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00168	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGCTCATTCAGGAA
136	EST00113	20	AL2-TCGGAGAAGTTGCAGTTTCTG	GTTAAAAGCTGTTAGACGGGGC
120	EST00103	22	CACCTGACTGACTCTCTTTA	GGAAACCGTAACTCTCCATAG
313	EST00276	X	ATTGACCTTCAATGTAATAA	TTGGATTGGGCAAAATAG

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<u>SEQ ID</u>	<u>EST#</u>	<u>Chr</u>	<u>PRIMER #1</u>	<u>PRIMER #2</u>
162	EST00133	X	ATGTGAGCATCTATACCTGC	AATGAAGGCATGAGAATAGG
1669	EST00827	X	CGGACAACTAGGATAAATGC	TACGCGTTTGAATGGCTTGA
1917	EST01029	X	GAATAGCATTATTAGCCAGT	GGACCTATTGGAGATCTACT
1708	EST00858	X	AL2-AAGGCGAGGATTATGTGC	TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

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The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. ESTs were used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., *Genomics* 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (*supra*). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOS 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOS 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

#### EXAMPLE 6

##### Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. **FASEB**

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J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

**EXAMPLE 7**

5        Alternative Technique for Mapping to Chromosomes  
      Mapping of ESTs to chromosomes using fluorescence in situ  
          hybridization

10        This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

15        0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO<sub>2</sub>/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

20        The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

25        The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al., Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

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The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOs 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., *Human Chromosomes: A Manual of Basic Techniques*. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

	SEQ ID	EST#	Map Location
	-----	-----	-----
15	A.	19	EST00023 6p
		22	EST00301 6p
		1894	EST01643 6p21
		1	EST00007 6q
		224	EST00356 6q
		288	EST00219 6q
	20	162	EST00133 Xp11.21 - Xp21.2
		1917	EST01029 Xp11.21 - Xp21.2
		1669	EST00827 Xq26 - Xq27.1
		1899	EST01014 Xq28
25	B.	1880	EST01634 1q32
		485	EST01466 7p13
		506	EST01471 10q11.2
		396	EST01443 17q25

## EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, *Nucleic Acids Research* 12: 387 (1984)).

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The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

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TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

<u>Bases from Primer</u>	<u>Mismatches/ Ambiguities</u> <sup>+</sup>	<u>Gaps Insertions</u> <sup>+</sup>	<u>Percent Deletions</u> <sup>+</sup>	<u>Aligned Accurate</u>	<u>Bases</u>
101 - 200	1.45	0.18	0.19	98.2	8,800
201 - 300	1.72	0.25	0.11	97.9	8,130
301 - 400	2.07	0.98	0.37	96.6	5,404
>400	3.53	2.63	1.06	92.8	3,197

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. <sup>+</sup>Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

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## EXAMPLE 9

Probability of ESTs Containing Coding Sequences

The ESTs of the present invention were statistically evaluated using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. *Proc. Natl. Acad. Sci. USA*, 88: 11261-5 (1991)). The CRM program uses a neural network to combine results from several different coding regions by looking at different 6 bp sequences found in coding exons and in introns. The program additionally conducts reading frame searches and assesses randomness at the third position of codons. This protocol categorizes sequences as having an excellent, good, marginal, or poor probability of containing coding regions. The results are reported in Tables 6-9. There were 219 ESTs categorized as "excellent" (Table 6); 120 categorized as "good" (Table 7); 113 categorized as "marginal" (Table 8); and 1743 categorized as "poor" (Table 9). These results indicate that most ESTs of the present invention comprise noncoding regions.

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SEQ ID#	EST#	SEQ ID#	EST#	SEQ ID#	EST#	SEQ ID#	EST#
7	EST00014	973	EST01987	1807	EST00941	2373	EST01393
15	EST00020	979	EST01993	1809	EST00943	2374	EST01394
48	EST00291	980	EST01994	1820	EST00951	2393	EST01417
62	EST00064	986	EST02000	1829	EST00958	2394	EST01418
66	EST00067	1000	EST02014	1849	EST00975	2396	EST01420
75	EST00074	1004	EST02018	1860	EST00983		
98	EST00260	1007	EST02021	1866	EST00989		
106	EST00092	1018	EST02032	1871	EST00994		
108	EST00094	1021	EST02035	1888	EST01005		
114	EST00098	1034	EST02050	1890	EST01007		
115	EST00099	1047	EST02063	1892	EST01009		
124	EST00107	1090	EST02109	1903	EST01018		
128	EST00252	1096	EST02115	1904	EST01019		
156	EST00130	1115	EST02135	1914	EST01026		
164	EST00135	1118	EST02138	1930	EST01040		
166	EST00137	1129	EST02149	1944	EST01050		
174	EST00296	1133	EST02153	1949	EST01054		
179	EST00145	1141	EST02163	1962	EST01062		
183	EST00148	1163	EST02187	1973	EST01071		
201	EST00163	1183	EST02208	1977	EST01075		
205	EST00165	1243	EST02272	1982	EST01080		
215	EST00172	1264	EST02293	1991	EST01088		
230	EST00181	1265	EST02294	1993	EST01090		
253	EST00199	1266	EST02295	2000	EST01097		
263	EST00203	1287	EST02317	2001	EST01098		
268	EST00369	1308	EST02338	2012	EST01106		
270	EST00207	1324	EST02354	2013	EST01107		
271	EST00283	1344	EST02374	2024	EST01117		
273	EST00208	1356	EST02386	2043	EST01131		
276	EST00211	1365	EST02396	2051	EST01138		
281	EST00214	1383	EST02415	2056	EST01142		
285	EST00286	1399	EST02433	2058	EST01144		
333	EST00394	1401	EST02435	2059	EST01145		
336	EST00397	1405	EST02439	2064	EST01149		
339	EST00400	1417	EST02452	2090	EST01167		
362	EST00418	1451	EST02487	2094	EST01171		
389	EST00440	1457	EST02493	2116	EST01192		
441	EST00481	1463	EST02500	2117	EST01193		
454	EST00493	1473	EST02510	2128	EST01202		
476	EST00509	1479	EST02516	2131	EST01205		
493	EST00522	1516	EST02555	2134	EST01208		
504	EST00529	1528	EST02569	2144	EST01216		
516	EST00538	1531	EST02572	2145	EST01217		
518	EST00540	1544	EST02586	2150	EST01222		
551	EST01482	1551	EST02593	2155	EST01227		
552	EST00565	1558	EST02601	2161	EST01231		
559	EST00570	1561	EST02604	2163	EST01238		
582	EST00592	1581	EST02625	2174	EST01242		
602	EST00606	1586	EST02631	2176	EST01244		
606	EST00609	1591	EST02636	2189	EST01255		
608	EST00611	1616	EST02661	2214	EST01272		
621	EST00620	1624	EST02670	2225	EST01278		
635	EST00629	1630	EST02676	2227	EST01279		
642	EST00634	1637	EST00796	2233	EST01284		
644	EST00636	1639	EST00799	2235	EST01286		
687	EST00671	1649	EST00808	2236	EST01287		
700	EST00683	1651	EST00810	2255	EST01302		
743	EST00714	1677	EST00835	2259	EST01304		
753	EST00721	1682	EST00839	2263	EST01307		
760	EST00726	1694	EST00849	SEQ ID#	EST#		
764	EST00729	1706	EST00857	2267	EST01756		
808	EST00761	1708	EST00858	2281	EST01321		
823	EST01864	1710	EST00860	2283	EST01322		
834	EST00771	1716	EST00865	2300	EST01333		
886	EST01886	SEQ ID#	EST#	2303	EST01335		
919	EST01921	1718	EST00867	2303	EST01335		
930	EST01933	1731	EST00879	2314	EST01345		
936	EST01939	1742	EST00887	2334	EST01358		
948	EST01957	1746	EST00891	2339	EST01362		
965	EST01978	1760	EST00903	2342	EST01365		
		1767	EST00907	2348	EST01371		
		1769	EST00909	2358	EST01379		
		1777	EST00913	2367	EST01388		

Table 7: ESTs with Good Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>				
		1041	EST02057	2362	EST01383
		1083	EST02102	2378	EST01397
20	EST00024	1099	EST02118	2399	EST01423
72	EST00071	1105	EST02124	2407	EST02714
82	EST00078	1113	EST02133		
88	EST00084	1139	EST02161		
137	EST00272	1146	EST02168		
177	EST00328	1196	EST02221		
193	EST00156	1210	EST02238		
200	EST00162	1233	EST02262		
218	EST00175	1285	EST02314		
228	EST00179	1331	EST02361		
247	EST00279	1388	EST02421		
264	EST00204	1418	EST02453		
267	EST00297	1439	EST02475		
296	EST00228	1502	EST02540		
371	EST00426	1537	EST02578		
385	EST00436	1563	EST02606		
392	EST00442	1599	EST02644		
414	EST00460	1602	EST02647		
433	EST00474	1693	EST00848		
453	EST00492	1695	EST00850		
471	EST00505	1729	EST00877		
496	EST00525	1730	EST00878		
524	EST00544	1738	EST00883		
526	EST00546	1739	EST00885		
529	EST00549	1743	EST00888		
549	EST00563	1768	EST00908		
557	EST00569	1780	EST00916		
578	EST00588	1804	EST00938		
596	EST00602	1805	EST00939		
607	EST00610	1811	EST00945		
619	EST00619	1819	EST00950		
657	EST00646	1826	EST00956		
660	EST00649	1830	EST00959		
689	EST00673	1845	EST00971		
695	EST00679	1848	EST00974		
699	EST00682	1853	EST00977		
729	EST00703	1967	EST01066		
742	EST00713	1992	EST01089		
747	EST00717	1994	EST01091		
755	EST00723	<u>SEQ ID#</u>	<u>EST#</u>		
759	EST00725				
776	EST00738	1997	EST01094		
778	EST00740	2046	EST01134		
782	EST01551	2101	EST01177		
829	EST00768	2102	EST01178		
835	EST00772	2105	EST01181		
836	EST00773	2106	EST01182		
862	EST01872	2141	EST01213		
881	EST01881	2184	EST01251		
<u>SEQ ID#</u>	<u>EST#</u>	2196	EST01260		
		2203	EST01264		
884	EST01884	2232	EST01283		
924	EST01926	2308	EST01339		
929	EST01932	2345	EST01368		
938	EST01941	2346	EST01369		
971	EST01985	2351	EST01373		
995	EST02009	2354	EST01375		
996	EST02010	2355	EST01376		
1031	EST02046	2359	EST01380		

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Table 8: ESTs with Marginal Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>		
11	EST00018	1222	EST02251
12	EST00274	1224	EST02253
24	EST00027	1228	EST02257
45	EST00364	1267	EST02296
79	EST00076	1301	EST02331
90	EST00302	1397	EST02431
110	EST00096	1448	EST02484
144	EST00120	1480	EST02517
145	EST00121	1493	EST02531
192	EST00155	1499	EST02537
222	EST00177	1503	EST02541
234	EST00184	1527	EST02568
277	EST00212	1536	EST02577
319	EST00381	1548	EST02590
368	EST00423	1562	EST02605
370	EST00425	1572	EST02615
387	EST00438	1575	EST02618
402	EST00451	1595	EST02640
415	EST00461	1608	EST02653
418	EST00464	1610	EST02655
426	EST00470	1621	EST02667
503	EST00528	1627	EST02674
517	EST00539	1629	EST02677
522	EST00543	1631	EST02678
532	EST00551	1683	EST00840
540	EST00557	1692	EST00847
570	EST00580	1751	EST00895
573	EST00583	1756	EST00900
576	EST00586	1764	EST02690
613	EST00615	1770	EST00910
617	EST00617	1793	EST00929
626	EST00622	1847	EST00973
681	EST00665	1877	EST00998
726	EST00700	1897	EST01012
727	EST00701	1900	EST01015
738	EST00711	1939	EST01655
745	EST00715	1940	EST01046
752	EST00720	1954	EST01058
791	EST00746	<u>SEQ ID#</u>	<u>EST#</u>
795	EST00749	1990	EST01087
803	EST00756	2008	EST01103
845	EST00777	2031	EST01123
852	EST00782	2041	EST01130
854	EST00784	2044	EST01132
907	EST01907	2060	EST01146
912	EST01912	2100	EST01176
935	EST01938	2136	EST01210
<u>SEQ ID#</u>	<u>EST#</u>	2153	EST01225
968	EST01981	2204	EST01265
985	EST01999	2212	EST01270
988	EST02002	2248	EST01297
1043	EST02059	2250	EST01299
1081	EST02100	2266	EST01310
1089	EST02108	2309	EST01340
1116	EST02136	2347	EST01370
1134	EST02154	2388	EST01406
1205	EST02233	2398	EST01422
		2405	EST01427

Table 9: ESTs with Poor Coding Probability

SEQ ID#	EST#	103	EST00317	204	EST00235	309	EST00174	404	EST00453
1	EST000007	104	EST00354	206	EST00166	315	EST00008	405	EST00454
2	EST000009	105	EST00365	207	EST00167	316	EST00378	406	EST00455
3	EST000010	107	EST00093	209	EST00331	317	EST00379	407	EST00456
4	EST000011	109	EST00095	210	EST00168	318	EST00380	408	EST00457
5	EST000012	111	EST00281	211	EST00332	320	EST00382	409	EST01444
6	EST000013	112	EST00318	212	EST00169	321	EST00383	410	EST00458
8	EST000234	113	EST00097	213	EST00170	322	EST00384	411	EST00459
10	EST000016	116	EST00100	214	EST00171	323	EST00385	412	EST01445
14	EST000019	117	EST00319	216	EST00173	325	EST00386	416	EST00462
16	EST000021	118	EST00101	219	EST00176	326	EST00387	417	EST00463
17	EST000022	119	EST00102	220	EST00372	327	EST00388	419	EST00465
18	EST000373	120	EST00103	221	EST00359	328	EST00389	420	EST00466
19	EST000023	121	EST00104	224	EST00356	329	EST00390	421	EST00467
21	EST000025	122	EST00105	225	EST00178	330	EST00391	422	EST01447
23	EST000026	123	EST00106	226	EST00333	331	EST00392	423	EST00468
25	EST000028	125	EST00108	229	EST00180	332	EST00393	424	EST01448
27	EST000029	126	EST00109	231	EST00334	334	EST00395	425	EST00469
28	EST000030	127	EST00320	232	EST00182	335	EST00396	427	EST01449
29	EST000031	129	EST00321	233	EST00183	337	EST00398	428	EST01451
30	EST000032	130	EST00355	235	EST00185	340	EST00402	429	EST00471
31	EST000033	131	EST00322	236	EST00186	341	EST00403	431	EST00473
32	EST000233	133	EST00111	237	EST00187	342	EST00404	432	EST01452
33	EST000034	134	EST00375	238	EST00188	344	EST00405	434	EST00475
34	EST000035	135	EST00112	239	EST00189	345	EST00406	435	EST00476
35	EST000036	136	EST00113	240	EST00335	347	EST01829	436	EST00477
36	EST000037	138	EST00114	241	EST00191	348	EST01830	437	EST00478
39	EST000039	139	EST00116	242	EST00192	349	EST01831	438	EST00479
40	EST000040	140	EST00117	243	EST00193	350	EST00407	439	EST00480
41	EST000041	141	EST00118	244	EST00194	351	EST00408	440	EST01454
42	EST000042	142	EST00323	245	EST00347	352	EST00409	442	EST01456
46	EST000044	143	EST00119	246	EST00196	353	EST00410	443	EST00482
47	EST000046	146	EST00122	250	EST00197	354	EST01433	444	EST00483
49	EST000047	147	EST00292	252	EST00198	355	EST00411	446	EST00485
50	EST000048	148	EST00236	254	EST00200	356	EST00412	447	EST00486
51	EST000049	149	EST00123	255	EST00201	357	EST00413	448	EST00487
52	EST000052	150	EST00124	256	EST00345	358	EST00414	449	EST00488
53	EST000054	151	EST00125	257	EST00337	359	EST00415	450	EST00489
54	EST000055	152	EST00126	259	EST00202	360	EST00416	451	EST00490
55	EST000056	153	EST00127	260	EST00357	361	EST00417	452	EST00491
56	EST000057	154	EST00128	261	EST00338	363	EST00419	455	EST00494
57	EST000058	155	EST00129	262	EST00339	364	EST00420	457	EST00495
58	EST000059	157	EST00131	265	EST00205	365	EST01434	458	EST00496
59	EST000061	158	EST00132	266	EST00206	366	EST00421	459	EST00497
60	EST000062	159	EST00325	272	EST00340	367	EST00422	460	EST01457
63	EST000065	160	EST00326	274	EST00268	369	EST00424	461	EST01836
64	EST000066	162	EST00133	275	EST00209	372	EST00427	462	EST00498
67	EST000351	163	EST00134	278	EST00342	373	EST01832	464	EST00499
68	EST000068	165	EST00136	279	EST00213	374	EST00428	465	EST00500
69	EST000360	167	EST00138	280	EST00343	375	EST00429	466	EST00501
71	EST000070	168	EST00140	283	EST00215	376	EST01436	467	EST00502
73	EST000072	169	EST00141	284	EST00216	377	EST00430	468	EST00503
74	EST000073	170	EST00295	286	EST00217	378	EST00431	470	EST00504
76	EST000075	171	EST00327	287	EST00218	379	EST00432	SEQ ID#	EST#
80	EST000077	172	EST00142	288	EST00219	380	EST01439	473	EST00506
81	EST000315	173	EST00143	289	EST00220	381	EST00433	474	EST00507
83	EST000079	175	EST00144	290	EST00221	382	EST00434	477	EST01463
84	EST000080	178	EST00294	291	EST00222	SEQ ID#	EST#	478	EST00510
85	EST000081	182	EST00329	292	EST00223	383	EST00435	479	EST00511
86	EST000082	184	EST00149	293	EST00224	384	EST01440	480	EST01464
87	EST000083	185	EST00150	294	EST00225	386	EST00437	481	EST00512
89	EST000085	186	EST00151	SEQ ID#	EST#	388	EST00439	482	EST01465
91	EST000086	190	EST00153	295	EST00226	390	EST01442	483	EST00513
92	EST000087	191	EST00154	297	EST00230	391	EST00441	484	EST00514
94	EST000353	194	EST00157	298	EST00231	393	EST00443	487	EST00516
95	EST000088	SEQ ID#	EST#	302	EST00303	395	EST00445	488	EST00517
96	EST000089	195	EST00158	303	EST00348	397	EST00446	489	EST00518
99	EST000316	196	EST00159	304	EST00307	398	EST00447	490	EST00519
SEQ ID#	EST#	197	EST00160	305	EST00308	399	EST00448	491	EST00520
100	EST000090	198	EST00161	306	EST00309	400	EST00449	492	EST00521
101	EST000091	199	EST00277	307	EST00312	401	EST00450	495	EST00524
		203	EST00164	308	EST00314	403	EST00452	497	EST00526

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498	EST01467	600	EST01492	697	EST00680	799	EST00752	894	EST01894
499	EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	EST01897
502	EST01469	605	EST00608	703	EST00685	805	EST00758	898	EST01898
507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
509	EST01472	611	EST00613	706	EST00688	809	EST00762	901	EST01901
510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
511	EST00533	615	EST00616	709	EST00690	811	EST00764	903	EST01903
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513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
515	EST00537	622	EST01843	713	EST00694	816	EST01856	908	EST01908
519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
520	EST00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
523	EST01838	627	EST00623	717	EST01525	820	EST01860	914	EST01914
525	EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
528	EST00548	630	EST01505	720	EST00697	826	EST01867	917	EST01919
530	EST01477	631	EST00625	721	EST01527	827	EST01558	918	EST01920
531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
533	EST00552	633	EST00627	723	EST00698	830	EST01559	921	EST01923
534	EST01478	634	EST00628	725	EST00699	831	EST00769	922	EST01924
535	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
536	EST01479	637	EST00630	730	EST00704	837	EST01561	925	EST01927
537	EST00554	638	EST00631	731	EST00705	838	EST00774	926	EST01929
538	EST00555	640	EST01509	732	EST00706	839	EST01562	927	EST01930
539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
541	EST00558	643	EST00635	734	EST00708	841	EST00776	931	EST01934
542	EST01480	645	EST00637	735	EST00709	842	EST01563	932	EST01935
543	EST00559	646	EST00638	736	EST01532	843	EST01564	933	EST01936
544	EST00560	647	EST00639	737	EST00710	844	EST01565	934	EST01937
545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
547	EST00561	649	EST00641	740	EST01535	847	EST00779	939	EST01943
548	EST00562	651	EST00643	741	EST00712	848	EST01566	SEQ ID#	EST#
550	EST00564	652	EST01510	744	EST01537	849	EST01567		
553	EST00566	654	EST00644	746	EST00716	850	EST00780	940	EST01944
555	EST01483	655	EST00645	748	EST01850	851	EST00781	941	EST01945
556	EST00568	656	EST01513	749	EST00719	SEQ ID#	EST#	942	EST01947
558	EST01484	658	EST00647	750	EST01539			943	EST01948
560	EST01485	659	EST00648	751	EST01540	853	EST00783	944	EST01949
561	EST00571	661	EST00650	754	EST00722	855	EST00785	945	EST01950
562	EST00572	662	EST00651	SEQ ID#	EST#	856	EST01568	946	EST01953
563	EST00573	663	EST00652			857	EST01868	947	EST01954
564	EST00574	664	EST00653	756	EST01541	858	EST01869	949	EST01958
565	EST00575	665	EST00654	758	EST00724	859	EST01870	950	EST01959
566	EST00576	SEQ ID#	EST#	761	EST01544	860	EST00786	953	EST01962
567	EST00577			762	EST00727	861	EST01871	954	EST01963
568	EST00578	666	EST01514	763	EST00728	863	EST01873	956	EST01968
569	EST00579	667	EST00655	765	EST00730	864	EST00787	957	EST01969
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		669	EST00657	767	EST00732	866	EST01874	959	EST01972
571	EST00581	670	EST00658	768	EST00733	867	EST01875	960	EST01973
572	EST00582	671	EST00659	770	EST00735	868	EST01876	961	EST01974
574	EST00584	672	EST00660	771	EST01546	869	EST00788	962	EST01975
575	EST00585	673	EST01515	772	EST00736	870	EST00789	963	EST01976
577	EST00587	674	EST01516	774	EST01548	871	EST00790	964	EST01977
580	EST00590	675	EST00661	775	EST00737	872	EST00791	966	EST01979
581	EST00591	676	EST00662	777	EST00739	873	EST00792	967	EST01980
583	EST00593	677	EST00663	779	EST00741	874	EST00793	970	EST01983
584	EST00594	678	EST01517	780	EST01549	875	EST00794	972	EST01986
585	EST00595	679	EST01518	781	EST01550	876	EST00795	974	EST01988
586	EST00596	680	EST00664	783	EST01552	877	EST01877	975	EST01989
587	EST01488	682	EST00666	785	EST01553	878	EST01878	976	EST01990
588	EST00597	683	EST00667	786	EST00742	879	EST01879	977	EST01991
589	EST00598	684	EST00668	787	EST00743	880	EST01880	978	EST01992
590	EST00599	685	EST00669	788	EST00744	882	EST01882	981	EST01995
591	EST01489	686	EST00670	789	EST00745	883	EST01883	982	EST01996
592	EST00600	688	EST00672	790	EST01554	885	EST01885	983	EST01997
593	EST00601	690	EST00674	792	EST00747	887	EST01887	984	EST01998
595	EST01840	692	EST00676	793	EST00748	889	EST01889	987	EST02001
597	EST00603	693	EST00677	794	EST01555	890	EST01890	989	EST02003
598	EST00604	694	EST00678	796	EST00750	892	EST01892	990	EST02004
599	EST00605	696	EST01521	797	EST00751	893	EST01893	991	EST02005

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992	EST02006	1086	EST02105	1184	EST02209	1274	EST02303	1363	EST02394
994	EST02008	1087	EST02106	1185	EST02210	1275	EST02304	1364	EST02395
997	EST02011	1088	EST02107	1186	EST02211	1276	EST02305	1366	EST02397
999	EST02013	1091	EST02110	1187	EST02212	1278	EST02307	1367	EST02398
1001	EST02015	1093	EST02112	1188	EST02213	1279	EST02308	1368	EST02399
1002	EST02016	1095	EST02114	1189	EST02214	1280	EST02309	1370	EST02401
1003	EST02017	1097	EST02116	1190	EST02215	1281	EST02310	1372	EST02403
1005	EST02019	1098	EST02117	1191	EST02216	1282	EST02311	1373	EST02404
1006	EST02020	1100	EST02119	1192	EST02217	1283	EST02312	1375	EST02406
1008	EST02022	1101	EST02120	1193	EST02218	1284	EST02313	1376	EST02407
1009	EST02023	1102	EST02121	1194	EST02219	1286	EST02316	1377	EST02408
1010	EST02024	1104	EST02123	1195	EST02220	1288	EST02318	1378	EST02409
1011	EST02025	1106	EST02125	1197	EST02222	1289	EST02319	1379	EST02410
1012	EST02026	1107	EST02126	1198	EST02223	1290	EST02320	1380	EST02411
1013	EST02027	1108	EST02127	1199	EST02224	1291	EST02321	1381	EST02413
1014	EST02028	1109	EST02128	1200	EST02226	1292	EST02322	1382	EST02414
1015	EST02029	1110	EST02129	1201	EST02228	1293	EST02323		
1016	EST02030	1111	EST02131	1202	EST02229	1294	EST02324		
1017	EST02031	1112	EST02132	1203	EST02230	1295	EST02325		
1019	EST02033	1114	EST02134	1204	EST02232	1296	EST02326		
1022	EST02036	1117	EST02137	1206	EST02234	SEQ ID#	EST#		
1023	EST02037	1119	EST02139	1207	EST02235				
1024	EST02038	1120	EST02140	1208	EST02236	1298	EST02328		
1025	EST02040	1121	EST02141	1209	EST02237	1299	EST02329		
1026	EST02041	1122	EST02142	SEQ ID#	EST#	1300	EST02330		
1027	EST02042	1123	EST02143			1302	EST02332		
1028	EST02043	1124	EST02144	1211	EST02239	1303	EST02333		
1029	EST02044	1125	EST02145	1212	EST02240	1304	EST02334		
1030	EST02045	SEQ ID#	EST#	1213	EST02241	1305	EST02335		
1032	EST02048			1214	EST02242	1306	EST02336		
1033	EST02049	1127	EST02147	1215	EST02244	1307	EST02337		
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		1131	EST02151	1218	EST02247	1311	EST02341		
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1051	EST02067	1148	EST02170	1236	EST02265	1323	EST02353		
1052	EST02068	1149	EST02171	1237	EST02266	1325	EST02355		
1053	EST02069	1150	EST02172	1238	EST02267	1326	EST02356		
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1063	EST02081	1161	EST02184	1250	EST02279	1338	EST02368		
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1066	EST02084	1165	EST02189	1253	EST02282	1343	EST02373		
1067	EST02085	1166	EST02190	1254	EST02283	1345	EST02375		
1068	EST02086	1167	EST02191	1255	EST02284	1346	EST02376		
1070	EST02088	1168	EST02193	1256	EST02285	1347	EST02377		
1071	EST02089	1169	EST02194	1257	EST02286	1349	EST02379		
1072	EST02090	1170	EST02195	1258	EST02287	1350	EST02380		
1073	EST02091	1171	EST02196	1259	EST02288	1351	EST02381		
1074	EST02092	1172	EST02197	1260	EST02289	1352	EST02382		
1075	EST02093	1173	EST02198	1261	EST02290	1353	EST02383		
1076	EST02094	1174	EST02199	1262	EST02291	1354	EST02384		
1077	EST02096	1175	EST02200	1263	EST02292	1355	EST02385		
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1907	EST01022	2016	EST01110	2118	EST01194	2223	EST01742	2332	EST01794
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1909	EST01024	2019	EST01112	2122	EST01197	2228	EST01280	2335	EST01359
1911	EST02694	2020	EST01113	2123	EST01713	2229	EST01281	2336	EST01360
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1913	EST01646	2022	EST01115	2125	EST01199	2237	EST01288	2340	EST01802
1915	EST01027	2023	EST01116	2126	EST01200	2238	EST01289	2341	EST01364
1916	EST01028	2025	EST01118	2127	EST01201	2239	EST01290	2343	EST01366
1917	EST01029	2026	EST01119	2129	EST01203	2240	EST01291	2344	EST01367
1918	EST02695	2027	EST01120	2130	EST01204	2241	EST01747	2349	EST01372
1919	EST01030	2028	EST01121	2132	EST01206	2242	EST01292	2350	EST02708
1920	EST01031	2029	EST01682	2133	EST01207	2243	EST01293	2352	EST01374
1921	EST01647	2030	EST01122	2135	EST01209	2244	EST01294	2356	EST01377
1922	EST01032	2033	EST01684	2137	EST01211	2246	EST01295	2357	EST01378
1923	EST01033	2034	EST01124	2139	EST01716	2247	EST01296	2360	EST01381
1924	EST01034	2035	EST01125	2140	EST01212	2249	EST01298	2361	EST01382
1925	EST01035	2036	EST01126	2142	EST01214	2251	EST01300	2363	EST01384
1926	EST01036	2037	EST01686	2143	EST01215	2252	EST01750	2364	EST01385
1927	EST01037	2038	EST01127	2147	EST01219	2253	EST01301	2365	EST01386
1929	EST01039	2039	EST01128	2148	EST01220	2256	EST02718	2366	EST01387
1932	EST01042	2040	EST01129	2151	EST01223	2257	EST01303	2369	EST01811
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1935	EST01044	2045	EST01133	2154	EST01226	2260	EST01305	2371	EST01391
1936	EST01045	2047	EST01135	2156	EST01718	2261	EST01755	2372	EST01392
1937	EST01652	2048	EST01136	2157	EST01719	2262	EST01306	2375	EST01815
1938	EST01654	2049	EST01689	2158	EST01228	2264	EST01308	2376	EST01395
1941	EST01047	2050	EST01137	2159	EST01229	2265	EST01309	2377	EST01396
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1966	EST01065	2075	EST01153	2180	EST01247	2285	EST01768		
1968	EST01067	2076	EST02702	2181	EST01248	2287	EST01770		
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1975	EST01073	SEQ ID#	EST#	2185	EST01252	2293	EST01327		
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1981	EST01079	2085	EST01162	2193	EST01258	2301	EST01334		
1983	EST01081	2086	EST01163	2194	EST01729	2304	EST01780		
1984	EST01082	2087	EST01164	2195	EST01259	2305	EST01336		
1985	EST01083	2088	EST01166	2197	EST01261	2306	EST01337		
1986	EST01084	2091	EST01168	2198	EST01730	2310	EST01341		
1988	EST01085	2093	EST01170	2199	EST01262	2311	EST01342		
1989	EST01086	2095	EST01701	2200	EST01731	2312	EST01343		
1995	EST01092	2096	EST01172	2201	EST01263	2313	EST01344		
1996	EST01093	2097	EST01173	2202	EST01732	2315	EST01346		
1998	EST01095	2098	EST01174	2205	EST01735	2316	EST01782		
1999	EST01096	2099	EST01175	2206	EST01736	2317	EST01347		
2002	EST01099	2103	EST01179	2208	EST01267	2318	EST01348		
2003	EST01675	2104	EST01180	2209	EST02717	2319	EST01349		
2005	EST01100	2107	EST01183	2210	EST01268	2321	EST01350		
2006	EST01101	2108	EST01184	2211	EST01269	2322	EST01351		
2007	EST01102	2109	EST01185	2213	EST01271	2323	EST01789		
2009	EST01677	2110	EST01186	2215	EST01273	2325	EST01353		
2010	EST01104	2111	EST01187	2218	EST01274	2327	EST01354		
2011	EST01105	2112	EST01188	2219	EST01275	2328	EST01355		
2014	EST01108	2113	EST01189	2220	EST01740	2329	EST01792		
2015	EST01109	2114	EST01190	2221	EST01741	2330	EST01793		
		2115	EST01191	2222	EST01276	2331	EST01356		

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<u>SEQ ID#</u>	<u>EST#</u>
2389	EST01407
2391	EST01415
2392	EST01416
2395	EST01419
2397	EST01421
2401	EST01424
2403	EST01425
2404	EST01426
2406	EST02713
2409	EST00273

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## EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

Table 10: Three-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
-----			
1834	EST01620	M	AMP deaminase, brain
97	EST00289	M	Aconitase
691	EST00675	M	Alcohol dehydrogenase
2092	EST01700	M	Anion exchanger homolog AE3
396	EST01443	M	CDPdiacylglycerol-serine O-phosphatidyltransferase
1956	EST01663	M	Ca <sup>2+</sup> -transporting ATPase 2
1039	EST02055	M	Calcium channel
2192	EST01257	M	Diacylglycerol kinase, lymphocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	M	Fo ATPase beta subunit, mitochondrial
1667	EST00825	M	Gamma-aminobutyric acid transporter
1412	EST02446	M	Glutamate-aspartate carrier protein
1020	EST02034	M	Glutaminase
2326	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
2173	EST01724	M	Lon protease
1427	EST02463	M	Long-chain-fatty-acid-CoA ligase
2226	EST01744	M	NAD(P) <sup>+</sup> transhydrogenase (B-specific)
1566	EST02609	M	Neutrophil oxidase factor
1681	EST01573	M	Nucleoside diphosphate kinase
2254	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
93	EST00287	M	Processing enhancing protein
2297	EST01775	M	Prohormone cleavage enzyme
9	EST00376	M	Prolyl endopeptidase
1654	EST01572	M	Protochlorophyllide reductase
38	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
1856	EST01627	M	Ribosomal protein L1a
1974	EST01667	M	Ribosomal protein L3
301	EST00300	M	Ribosomal protein L30
22	EST00301	M	Ribosomal protein S10
2402	EST01826	M	Ribosomal protein S10
463	EST01459	M	Ribosomal protein YL10
2073	EST01697	M	Succinate dehydrogenase flavoprotein
2138	EST01715	M	Succinate dehydrogenase flavoprotein
1771	EST01601	M	Thiosulfate sulfurtransferase (rhodanese)
2121	EST01711	M	Valine-tRNA ligase
1726	EST01588	M	XPR2 alkaline extracellular protease
913	EST01913	M	Clathrin coat assembly protein AP50 homolog
1035	EST02051	M	J1 protein
969	EST01982	R	ADP-ribosylation factor 1
1126	EST02146	R	Calbindin D28
1910	EST01645	R	Calmodulin
485	EST01466	R	Calmodulin-dependent protein kinase, type II, beta
2302	EST01779	R	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R	Kinase 5 protein
2282	EST01764	R	Lamin B receptor
SEQ ID	EST#	Group	Putative Identification
-----			
161	EST00247	R	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	R	MARCKS homolog
1386	EST02418	R	MARCKS homolog
227	EST00259	R	Notch/Xotch
952	EST01961	R	Notch/Xotch
1395	EST02429	R	Nuclear factor 1-like protein (NF1)
2353	EST01806	R	Prohibitin
1069	EST02087	R	Protein kinase C, zeta
1933	EST01650	R	Protein phosphatase 2A beta subunit

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202	EST00298	R	Protein-tyrosine phosphatase LRP
1478	EST02515	R	Rab5
1408	EST02442	R	Seven in absentia
300	EST00232	R	Transforming protein (db1)
1147	EST02169	R	Tyrosine kinase
1348	EST02378	R	cAMP-dependent protein kinase inhibitor
1931	EST01041	R	cAMP-regulated phosphoprotein
1413	EST02447	R	cAMP-specific phosphodiesterase
37	EST00038	R	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	R	rho H12/ ARH12
299	EST00249	R	smg p25A GDP dissociation inhibitor
189	EST00282	R	trkB
1332	EST02362	R	GA binding protein, beta subunit
1277	EST02306	R	Bib protein
43	EST00371	R	Maternal G10 protein
1704	EST01580	R	Myeloid differentiation primary response gene My
346	EST01828	R	Otd homeotic protein
187	EST00152	R	Wilm's tumor-related protein
249	EST00275	R	Zinc Finger Proteins
413	EST01446	R	Zinc Finger Proteins
469	EST01460	R	Zinc Finger Proteins
833	EST01560	R	Zinc Finger Proteins
1230	EST02259	R	Zinc finger proteins
1496	EST02534	R	Zinc finger proteins
2324	EST01352	R	Zinc Finger Proteins
208	EST00250	S	60K filarial antigen
2320	EST01784	S	60K filarial antigen
251	EST00370	S	Actin, other
2146	EST01218	S	Actin, other
248	EST00271	S	Actinin, alpha
891	EST01891	S	Actinin, alpha
1500	EST02538	S	Actinin, alpha
132	EST00110	S	Agrin
1852	EST01625	S	Agrin
1965	EST01664	S	Amyloid A4
2068	EST01694	S	Amyloid A4
2408	EST00244	S	Amyloid A4
1880	EST01634	S	Axonal glycoprotein TAG-1
2004	EST01676	S	Cofilin
650	EST00642	S	Dilute (myosin heavy chain)
2217	EST01738	S	Gelation factor ABP-280
1885	EST01639	S	Histocompatibility antigen modifier 1
77	EST00257	S	Kinesin
SEQ ID	EST#	Group	Putative Identification
78	EST00258	S	Kinesin
2245	EST01748	S	Kinesin
313	EST00276	S	Lysosomal membrane glycoprotein 1 (LAMP-1)
223	EST00368	S	Microtubule-associated protein 1B
824	EST01865	S	Microtubule-associated protein 1B
2032	EST01683	S	Microtubule-associated protein 1B
2017	EST01678	S	Milk fat globule membrane protein
1567	EST02610	S	Neural cell adhesion molecule L1
506	EST01471	S	Neuraxin
2368	EST01389	S	Radial spoke protein 3
951	EST01960	S	Spectrin, beta
2089	EST01699	S	Sperm membrane protein
653	EST01512	S	Tubulin, alpha
311	EST00270	S	Tubulin, beta
594	EST01490	S	Tubulin, beta
757	EST01542	S	Tubulin, beta
1245	EST02274	S	Tubulin, beta
1589	EST02634	S	Tubulin, beta
1468	EST02505	S	Matrin 3

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1371	EST02402	S	Talin
1701	EST00853	S	Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

Table 11: Thirteen-Class Functional Groupings of ESTs

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
300	EST00232	OG	Transforming protein (dbl)
37	EST00038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	OM	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphocyte
1441	EST02477	OM	Diamine acetyltransferase
2289	EST01325	OM	Fatty acid synthase
1020	EST02034	OM	Glutaminase
2326	EST01791	OM	Inositol-1,4,5-trisphosphate 3-kinase
1427	EST02463	OM	Long-chain-fatty-acid-CoA ligase
2226	EST01744	OM	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	OM	Neutrophil oxidase factor
1681	EST01573	OM	Nucleoside diphosphate kinase

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2254	EST01751	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
1654	EST01572	OM	Protochlorophyllide reductase
2073	EST01697	OM	Succinate dehydrogenase flavoprotein
2138	EST01715	OM	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Thiosulfate sulfurtransferase (rhodanese)
2173	EST01724	PI	Lon protease
2297	EST01775	PI	Prohormone cleavage enzyme
9	EST00376	PI	Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
132	EST00110	SC	Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00258	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST00368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC	Tubulin, beta
594	EST01490	SC	Tubulin, beta
757	EST01542	SC	Tubulin, beta
1245	EST02274	SC	Tubulin, beta
1589	EST02634	SC	Tubulin, beta
1701	EST00853	SC	Unc-104
969	EST01982	ST	ADP-ribosylation factor 1
1126	EST02146	ST	Calbindin D28
1910	EST01645	ST	Calmodulin
161	EST00247	ST	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	ST	MARCKS homolog
1386	EST02418	ST	MARCKS homolog
1931	EST01041	ST	cAMP-regulated phosphoprotein
1413	EST02447	ST	cAMP-specific phosphodiesterase
299	EST00249	ST	smg p25A GDP dissociation inhibitor



<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca <sup>2+</sup> -transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	EST00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI: Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

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## EXAMPLE 11

cDNA Libraries Generated From Specific Genomic DNA  
by Exon Expression & Amplification

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Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection by electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A)+ cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were end-repaired with T4 DNA polymerase, digested with the appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/X-gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.

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When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

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**EXAMPLE 12****PCR Amplification from Predicted Exons**

10 Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, Proc. Natl. Acad. Sci. USA 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, Comp. Applic. Biosci. 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

25 This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

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sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

### EXAMPLE 13

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#### Complete Sequence of EST Clone Inserts

There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the EST sequences. Procedures for these methods are provided in Basic Methods in Molecular Biology (David et al. *supra*). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA clone. The complete sequence of the inserts of four EST clones (representing SEQ ID NOs 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). The KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. This results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

Samples for each time point was purified by electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

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software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

#### EXAMPLE 14

##### Determining Reading Frame, Orientation, Coding Regions: ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GRAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

#### EXAMPLE 15

##### Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

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present invention, to prepare PCR primers for a variety of applications. The PCR primers are preferably at least 15 bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

#### EXAMPLE 16

##### Forensic Matching by DNA Sequencing

In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. This lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, should be demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

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of 100 bases in length are used to prove identity between the suspect and the sample.

**EXAMPLE 17**

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**Positive Identification by DNA Sequencing**

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprint-type identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

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**EXAMPLE 18**

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**Southern Blot Forensic Identification**

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

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blotting see Davis et al. (Basic Methods in Molecular Biology, 1986, Elsevier Press. pp 62-65).

A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using end-labeled oligonucleotides derived from the ESTs, nick translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide a statistically higher level of confidence in the identification since there will be an increased number of sets of bands used for identification.

#### EXAMPLE 19

##### Dot Blot Identification Procedure

Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with  $P^{32}$  using polynucleotide kinase (Pharmacia). Dot Blots are created by spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID



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NOs provided in Table 7 onto nitrocellulose or the like using a vacuum dot blot manifold (BioRad, Richmond California). The nitrocellulose filter containing the EST clone sequences is baked or UV linked to the filter, prehybridized and hybridized with labeled probe using techniques known in the art (Davis et al. supra). The <sup>32</sup>P labeled DNA fragments are sequentially hybridized with successively stringent conditions to detect minimal differences between the 30 bp sequence and the DNA. Tetramethylammonium chloride is useful for identifying clones containing small numbers of nucleotide mismatches (Wood et al., Proc. Natl. Acad. Sci. USA 82(6):1585-1588 (1985) which is hereby incorporated by reference. A unique pattern of dots distinguishes one individual from another individuals.

#### EXAMPLE 20

##### Alternative "Fingerprint" Identification Technique

EST sequences and the corresponding complete cDNA sequences can be used to create a unique fingerprint for an individual. Thus pools of EST sequences can be used in forensics, paternity suits or the like to differentiate one individual from another.

Entire EST sequences can be used; similarly oligonucleotides can be prepared from EST sequences. In this example, 20-mer oligonucleotides are prepared from 200 EST sequences using commercially available oligonucleotide services such as Oligos Etc., Wilsonville, OR. Patient cell samples are processed for DNA using techniques well known to those with skill in the art. The nucleic acid is digested with restriction enzymes EcoRI and XbaI. Following digestion, samples are applied to wells for electrophoresis. The procedure, as known in the art, may be modified to accommodate polyacrylamide electrophoresis, however in this example, samples containing 5 ug of DNA are loaded into wells

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and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with  $P^{32}$ . The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

#### EXAMPLE 21

##### Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.

## EXAMPLE 22

Identification of a gene associated with  
Angelman's disease

5

Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. (The example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's disease. Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

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from normal patients is essential for providing gene or other therapies for AD patients.

Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA<sub>A</sub> receptor

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protein subunit from patients with Angelman's disease (*Am. J. Hum. Genet.* 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

5

**EXAMPLE 23****Preparation and Use of Antisense Oligonucleotides**

Antisense RNA molecules are known to be useful for  
10 regulating translation within the cell. Antisense RNA  
molecules can be produced from EST sequences or from the  
corresponding gene sequences. These antisense molecules can  
be used as diagnostic probes to determine whether or not a  
particular gene is expressed in a cell. Similarly, the  
15 antisense molecules can be used as a therapeutic to regulate  
gene expression once the EST is associated with a particular  
disease (see Example 22).

The antisense molecules are obtained from a nucleotide  
sequence by reversing the orientation of the coding region  
20 with regard to the promoter. Thus, the antisense RNA is  
complementary to the corresponding mRNA. For a review of  
antisense design see Green et al., *Ann. Rev. Biochem.* 55:569-  
597 (1986), which is hereby incorporated by reference. The  
antisense sequences can contain modified sugar phosphate  
25 backbones to increase stability and make them less sensitive  
to RNase activity. Examples of the modifications are  
described by Rossi et al., *Pharmacol. Ther.* 50(2):245-254,  
(1991).

Antisense molecules are introduced into cells that  
30 express the gene corresponding to the EST of interest in  
culture. In a preferred application of this invention, the  
polypeptide encoded by the gene is first identified, so that  
the effectiveness of antisense inhibition on translation can  
be monitored using techniques that include but are not  
35 limited to antibody-mediated tests such as RIAs and ELISA,  
functional assays, or radiolabelling. The antisense molecule  
is introduced into the cells by diffusion or by transfection

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procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between  $1 \times 10^{-10} \text{M}$  to  $1 \times 10^{-4} \text{M}$ . Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of  $1 \times 10^{-7}$  translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

#### EXAMPLE 24

##### Preparation and use of Triple Helix Probes

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

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expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a cell. Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention.

Homopyrimidine oligonucleotides bind to the major groove at homopurine:homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOS such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. For information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (*Science* 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides may be prepared on an oligonucleotide synthesizer or they may be purchased commercially from a company specializing in custom oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but are not limited to calcium phosphate precipitation, DEAE-Dextran, electroporation, liposome-mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

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with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

#### EXAMPLE 25

##### Gene expression from DNA Sequences Corresponding to ESTs

10

A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector



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includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5' primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example,  $\beta$ -globin. Antibody to  $\beta$ -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the  $\beta$ -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating  $\beta$ -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit  $\beta$ -globin. Intron II of the rabbit  $\beta$ -globin gene facilitates splicing of the expressed transcript,

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and the polyadenylation signal incorporated into the construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express™ Translation Kit (Stratagene).

### Example 26

#### Production of an Antibody to a Human Protein

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

##### A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., Nature 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a

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microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., *Meth. Enzymol.* 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. **Basic Methods in Molecular Biology** Elsevier, New York. Section 21-2.

#### B. Polyclonal Antibody Production by Immunization

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. *J. Clin. Endocrinol. Metab.* 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: **Handbook of Experimental Immunology** D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12  $\mu$ M). Affinity of the antisera for the antigen is

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determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: **Manual of Clinical Immunology**, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

5       Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a  
10       biological sample.

#### EXAMPLE 27

##### Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

15       Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker.  
20       Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

25       Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate  
30       fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies are labeled with the marker. Either monoclonal or  
35       heterologous antisera is suitable for either procedure.

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**A. Immunohistochemical Techniques**

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: **Basic & Clinical Immunology**, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: **Methods in Immunodiagnosis**, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example  $^{125}\text{I}$ , and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4  $\mu\text{m}$ , unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

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Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5        If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for  
10        example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

      The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that  
15        signal using appropriate standards.

**B. Identification of Tissue Specific Soluble Proteins**

      The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection  
20        strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

      A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or  
25        osmotic lysis, using detergents in either case as required to disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and  
30        the soluble protein-containing fraction concentrated if necessary and reserved for analysis.

      A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by  
35        Davis, L. et al., Section 19-2 in: **Basic Methods in Molecular Biology** (P. Leder, ed), Elsevier, New York (1986), using a

range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50  $\mu$ l, and containing from about 1 to 100  $\mu$ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis, is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

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differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

5        While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

10

#### VII. Correlation of EST and Clone Identifiers

15        The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

20        Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).



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Table 12. SEQ ID NO Cross References

SEQ ID	EST#	Clone	GB#	SEQ ID	EST#	Clone	GB#	SEQ ID	EST#	Clone	GB#	SEQ ID	EST#	Clone	GB#	SEQ ID	EST#	Clone	GB#
1	EST00007	HFBA01	M61959	64	EST000066	HHCC13	M62010	129	EST000252	HHCC18	M62011	130	EST000321	HHCC21	M62012	131	EST000351	HHCC22	M62013
2	EST00009	HFBA05	M61963	65	EST000067	HHCC18	M62011	132	EST000352	HHCC22	M62012	133	EST000353	HHCC22	M62012	134	EST000354	HHCC22	M62013
3	EST00011	HFBA08	M61961	66	EST000068	HHCC22	M62012	135	EST000355	HHCC22	M62013	136	EST000356	HHCC22	M62013	137	EST000357	HHCC22	M62013
4	EST00012	HFBA10	M61962	67	EST000069	HHCC22	M62012	138	EST000358	HHCC22	M62013	139	EST000359	HHCC22	M62013	140	EST000360	HHCC22	M62013
5	EST00013	HFBA11	M61963	68	EST000070	HHCC22	M62012	141	EST000361	HHCC22	M62013	142	EST000362	HHCC22	M62013	143	EST000363	HHCC22	M62013
6	EST00014	HFBA11	M61964	69	EST000071	HHCC22	M62012	144	EST000364	HHCC22	M62013	145	EST000365	HHCC22	M62013	146	EST000366	HHCC22	M62013
7	EST00015	HFBA26	M61965	70	EST000072	HHCC22	M62012	147	EST000367	HHCC22	M62013	148	EST000368	HHCC22	M62013	149	EST000369	HHCC22	M62013
8	EST00016	HFBA26	M61966	71	EST000073	HHCC22	M62012	150	EST000370	HHCC22	M62013	151	EST000371	HHCC22	M62013	152	EST000372	HHCC22	M62013
9	EST00017	HFBA26	M61967	72	EST000074	HHCC22	M62012	153	EST000373	HHCC22	M62013	154	EST000374	HHCC22	M62013	155	EST000375	HHCC22	M62013
10	EST00018	HFBA36	M61968	73	EST000075	HHCC22	M62012	156	EST000376	HHCC22	M62013	157	EST000377	HHCC22	M62013	158	EST000378	HHCC22	M62013
11	EST00019	HFBA36	M61969	74	EST000076	HHCC22	M62012	159	EST000379	HHCC22	M62013	160	EST000380	HHCC22	M62013	161	EST000381	HHCC22	M62013
12	EST00020	HFBA36	M61970	75	EST000077	HHCC22	M62012	162	EST000382	HHCC22	M62013	163	EST000383	HHCC22	M62013	164	EST000384	HHCC22	M62013
13	EST00021	HFBA69	M61971	76	EST000078	HHCC22	M62012	165	EST000385	HHCC22	M62013	166	EST000386	HHCC22	M62013	167	EST000387	HHCC22	M62013
14	EST00022	HFBA77	M61972	77	EST000079	HHCC22	M62012	168	EST000388	HHCC22	M62013	169	EST000389	HHCC22	M62013	170	EST000390	HHCC22	M62013
15	EST00023	HFBA84	M61973	78	EST000080	HHCC22	M62012	171	EST000391	HHCC22	M62013	172	EST000392	HHCC22	M62013	173	EST000393	HHCC22	M62013
16	EST00024	HFBA86	M61974	79	EST000081	HHCC22	M62012	174	EST000394	HHCC22	M62013	175	EST000395	HHCC22	M62013	176	EST000396	HHCC22	M62013
17	EST00025	HFBA87	M61975	80	EST000082	HHCC22	M62012	177	EST000397	HHCC22	M62013	178	EST000398	HHCC22	M62013	179	EST000399	HHCC22	M62013
18	EST00026	HFBA87	M61976	81	EST000083	HHCC22	M62012	180	EST000399	HHCC22	M62013	181	EST000400	HHCC22	M62013	182	EST000401	HHCC22	M62013
19	EST00027	HFBA87	M61977	82	EST000084	HHCC22	M62012	183	EST000402	HHCC22	M62013	184	EST000403	HHCC22	M62013	185	EST000404	HHCC22	M62013
20	EST00028	HFBA90	M61978	83	EST000085	HHCC22	M62012	186	EST000405	HHCC22	M62013	187	EST000406	HHCC22	M62013	188	EST000407	HHCC22	M62013
21	EST00029	HFBA90	M61979	84	EST000086	HHCC22	M62012	189	EST000408	HHCC22	M62013	190	EST000409	HHCC22	M62013	191	EST000410	HHCC22	M62013
22	EST00030	HFBA90	M61980	85	EST000087	HHCC22	M62012	192	EST000411	HHCC22	M62013	193	EST000412	HHCC22	M62013	194	EST000413	HHCC22	M62013
23	EST00031	HFBA90	M61981	86	EST000088	HHCC22	M62012	195	EST000414	HHCC22	M62013	196	EST000415	HHCC22	M62013	197	EST000416	HHCC22	M62013
24	EST00032	HFBA90	M61982	87	EST000089	HHCC22	M62012	198	EST000417	HHCC22	M62013	199	EST000418	HHCC22	M62013	200	EST000419	HHCC22	M62013
25	EST00033	HFBA90	M61983	88	EST000090	HHCC22	M62012	201	EST000420	HHCC22	M62013	202	EST000421	HHCC22	M62013	203	EST000422	HHCC22	M62013
26	EST00034	HFBA90	M61984	89	EST000091	HHCC22	M62012	204	EST000423	HHCC22	M62013	205	EST000424	HHCC22	M62013	206	EST000425	HHCC22	M62013
27	EST00035	HFBA90	M61985	90	EST000092	HHCC22	M62012	207	EST000426	HHCC22	M62013	208	EST000427	HHCC22	M62013	209	EST000428	HHCC22	M62013
28	EST00036	HFBA90	M61986	91	EST000093	HHCC22	M62012	210	EST000429	HHCC22	M62013	211	EST000430	HHCC22	M62013	212	EST000431	HHCC22	M62013
29	EST00037	HFBA90	M61987	92	EST000094	HHCC22	M62012	213	EST000432	HHCC22	M62013	214	EST000433	HHCC22	M62013	215	EST000434	HHCC22	M62013
30	EST00038	HFBA90	M61988	93	EST000095	HHCC22	M62012	216	EST000435	HHCC22	M62013	217	EST000436	HHCC22	M62013	218	EST000437	HHCC22	M62013
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567	EST00577	78429	HFBCB95	633	EST00627	78479	HFBCB91	699	EST00682	78534	HFBCD90	735	EST00695	78547	HFBCD11
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900	EST01652	M78068	HBCE33
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906	EST01658	M78074	HBCE39
907	EST01659	M78075	HBCE40
908	EST01660	M78076	HBCE41
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910	EST01662	M78078	HBCE43
911	EST01663	M78079	HBCE44
912	EST01664	M78080	HBCE45
913	EST01665	M78081	HBCE46
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94	EST01949	M85433	HFBC13	1011	EST02024	M85508	HFBCJ18	1076	EST02094	M85578	HFBCK31	1132	EST02152	M85635	HFBC115
95	EST01950	M85434	HFBC14	1012	EST02025	M85509	HFBCJ20	1077	EST02095	M85579	HFBCK32	1133	EST02153	M85636	HFBC116
96	EST01951	M85435	HFBC15	1013	EST02026	M85510	HFBCJ24	1078	EST02096	M85580	HFBCK33	1134	EST02154	M85637	HFBC117
97	EST01952	M85436	HFBC16	1014	EST02027	M85511	HFBCJ34	1079	EST02097	M85581	HFBCK34	1135	EST02155	M85638	HFBC118
98	EST01953	M85437	HFBC17	1015	EST02028	M85512	HFBCJ35	1080	EST02098	M85582	HFBCK35	1136	EST02156	M85639	HFBC119
99	EST01954	M85438	HFBC18	1016	EST02029	M85513	HFBCJ39	1081	EST02099	M85583	HFBCK36	1137	EST02157	M85640	HFBC120
100	EST01955	M85439	HFBC19	1017	EST02030	M85514	HFBCJ40	1082	EST02100	M85584	HFBCK37	1138	EST02158	M85641	HFBC121
101	EST01956	M85440	HFBC20	1018	EST02031	M85515	HFBCJ41	1083	EST02101	M85585	HFBCK38	1139	EST02159	M85642	HFBC122
102	EST01957	M85441	HFBC21	1019	EST02032	M85516	HFBCJ42	1084	EST02102	M85586	HFBCK39	1140	EST02160	M85643	HFBC123
103	EST01958	M85442	HFBC22	1020	EST02033	M85517	HFBCJ49	1085	EST02103	M85587	HFBCK40	1141	EST02161	M85644	HFBC124
104	EST01959	M85443	HFBC23	1021	EST02034	M85518	HFBCJ50	1086	EST02104	M85588	HFBCK41	1142	EST02162	M85645	HFBC125
105	EST01960	M85444	HFBC24	1022	EST02035	M85519	HFBCJ51	1087	EST02105	M85589	HFBCK42	1143	EST02163	M85646	HFBC126
106	EST01961	M85445	HFBC25	1023	EST02036	M85520	HFBCJ52	1088	EST02106	M85590	HFBCK43	1144	EST02164	M85647	HFBC127
107	EST01962	M85446	HFBC26	1024	EST02037	M85521	HFBCJ54	1089	EST02107	M85591	HFBCK44	1145	EST02165	M85648	HFBC128
108	EST01963	M85447	HFBC27	1025	EST02038	M85522	HFBCJ55	1090	EST02108	M85592	HFBCK45	1146	EST02166	M85649	HFBC129
109	EST01964	M85448	HFBC28	1026	EST02039	M85523	HFBCJ56	1091	EST02109	M85593	HFBCK46	1147	EST02167	M85650	HFBC130
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111	EST01966	M85450	HFBC30	1028	EST02041	M85525	HFBCJ60	1093	EST02111	M85595	HFBCK48	1149	EST02169	M85652	HFBC132
112	EST01967	M85451	HFBC31	1029	EST02042	M85526	HFBCJ61	1094	EST02112	M85596	HFBCK49	1150	EST02170	M85653	HFBC133
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115	EST01970	M85454	HFBC34	1032	EST02045	M85529	HFBCJ64	1097	EST02115	M85599	HFBCK52	1153	EST02173	M85656	HFBC136
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117	EST01972	M85456	HFBC36	1034	EST02047	M85531	HFBCJ67	1099	EST02117	M85601	HFBCK54	1155	EST02175	M85658	HFBC138
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121	EST01976	M85460	HFBC40	1038	EST02051	M85535	HFBCJ72	1103	EST02121	M85605	HFBCK58	1159	EST02179	M85662	HFBC142
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126	EST01981	M85465	HFBC45	1043	EST02056	M85540	HFBCJ78	1108	EST02126	M85610	HFBCK63	1164	EST02184	M85667	HFBC147
127	EST01982	M85466	HFBC46	1044	EST02057	M85541	HFBCJ79	1109	EST02127	M85611	HFBCK64	1165	EST02185	M85668	HFBC148
128	EST01983	M85467	HFBC47	1045	EST02058	M85542	HFBCJ80	1110	EST02128	M85612	HFBCK65	1166	EST02186	M85669	HFBC149
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132	EST01987	M85471	HFBC51	1049	EST02062	M85546	HFBCJ87	1114	EST02132	M85616	HFBCK69	1170	EST02190	M85673	HFBC153
133	EST01988	M85472	HFBC52	1050	EST02063	M85547	HFBCJ88	1115	EST02133	M85617	HFBCK70	1171	EST02191	M85674	HFBC154
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138	EST01993	M85477	HFBC57	1055	EST02068	M85552	HFBCJ96	1120	EST02138	M85622	HFBCK75	1176	EST02196	M85679	HFBC159
139	EST01994	M85478	HFBC58	1056	EST02069	M85553	HFBCJ97	1121	EST02139	M85623	HFBCK76	1177	EST02197	M85680	HFBC160
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141	EST01996	M85480	HFBC60	1058	EST02071	M85555	HFBCJ99	1123	EST02141	M85625	HFBCK78	1179	EST02199	M85682	HFBC162
142	EST01997	M85481	HFBC61	1059	EST02072	M85556	HFBCJ01	1124	EST02142	M85626	HFBCK79	1180	EST02200	M85683	HFBC163
143	EST01998	M85482	HFBC62	1060	EST02073	M85557	HFBCJ02	1125	EST02143	M85627	HFBCK80	1181	EST02201	M85684	HFBC164
144	EST01999	M85483	HFBC63	1061	EST02074	M85558	HFBCJ03	1126	EST02144	M85628	HFBCK81	1182	EST02202	M85685	HFBC165
145	EST02000	M85484	HFBC64	1062	EST02075	M85559	HFBCJ04	1127	EST02145	M85629	HFBCK82	1183	EST02203	M85686	HFBC166
146	EST02001	M85485	HFBC65	1063	EST02076	M85560	HFBCJ05	1128	EST02146	M85630	HFBCK83	1184	EST02204	M85687	HFBC167
147	EST02002	M85486	HFBC66	1064	EST02077	M85561	HFBCJ06	1129	EST02147	M85631	HFBCK84	1185	EST02205	M85688	HFBC168
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152	EST02007	M85491	HFBC71	1069	EST02082	M85566	HFBCJ11	1134	EST02152	M85636	HFBCK89	1190	EST02210	M85693	HFBC173
153	EST02008	M85492	HFBC72	1070	EST02083	M85567	HFBCJ12	1135	EST02153	M85637	HFBCK90	1191	EST02211	M85694	HFBC174
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156	EST02011	M85495	HFBC75	1073	EST02086	M85570	HFBCJ15	1138	EST02156	M85640	HFBCK93	1194	EST02214	M85697	HFBC177
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158	EST02013	M85497	HFBC77	1075	EST02088	M85572	HFBCJ17	1140	EST02158	M85642	HFBCK95	1196	EST02216	M85699	HFBC179
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162	EST02017	M85501	HFBC81	1079	EST02092	M85576	HFBCJ21	1144	EST02162	M85646	HFBCK99	1200	EST02220	M85703	HFBC183
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164	EST02019	M85503	HFBC83	1081	EST02094	M85578	HFBCJ23	1146	EST02164	M85648	HFBCK01	1202	EST02222	M85705	HFBC185
165	EST02020	M85504	HFBC84	1082	EST02095	M85579	HFBCJ24	1147	EST02165	M85649	HFBCK02	1203	EST02223	M85706	HF

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136	EST02156	M85639	HFBC25	1202	EST02227	M85710	HFBCM35	1257	EST02286	M85765	HFBCN37
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153	EST02175	M85658	HFBC52	1219	EST02244	M85727	HFBCM72	1274	EST02303	M85782	HFBCN60
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171	EST02196	M85677	HFBC89	1237	EST02262	M85745	HFBCM93	1292	EST02321	M85801	HFBCN90
172	EST02197	M85678	HFBC91	1238	EST02263	M85746	HFBCM94	1293	EST02322	M85802	HFBCN91
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176	EST02201	M85682	HFBC96	1242	EST02267	M85750	HFBCM98	1297	EST02326	M85806	HFBCN96
177	EST02202	M85683	HFBC99	1243	EST02268	M85751	HFBCM99	1298	EST02327	M85807	HFBCN99
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179	EST02204	M85685	HFBCM05	1245	EST02270	M85753	HFBCN15	1300	EST02329	M85809	HFBCN96
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184	EST02209	M85690	HFBCM12	1250	EST02275	M85758	HFBCN20	1305	EST02334	M85814	HFBCN96
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186	EST02211	M85692	HFBCM15	1252	EST02277	M85760	HFBCN22	1307	EST02336	M85816	HFBCN96
187	EST02212	M85693	HFBCM16	1253	EST02278	M85761	HFBCN23	1308	EST02337	M85817	HFBCN96
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1505	EST02543	M86018	HFCV31	1511	EST02614	M86089	HFBDJ18	1637	EST02684	M85318	HICF48	1693	EST01579	M77994	HICMC41
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1517	EST02555	M86030	HFCV43	1523	EST02626	M86101	HFBDJ30	1649	EST02696	M85330	HICF60	1705	EST01591	M78006	HICMC53
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2124	EST01200	M79053	HHCPH85	2190	EST01262	M79113	HHCPK99	2256	EST01317	M79168	HHCPH99
2125	EST01201	M79054	HHCPH85	2191	EST01263	M79114	HHCPK99	2257	EST01318	M79169	HHCPH99
2126	EST01202	M79055	HHCPH85	2192	EST01264	M79115	HHCPK99	2258	EST01319	M79170	HHCPH99
2127	EST01203	M79056	HHCPH85	2193	EST01265	M79116	HHCPK99				
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2131	EST01207	M79060	HHCPH85	2197	EST01269	M79120	HHCPK99				
2132	EST01208	M79061	HHCPH85	2198	EST01270	M79121	HHCPK99				
2133	EST01209	M79062	HHCPH85	2199	EST01271	M79122	HHCPK99				
2134	EST01210	M79063	HHCPH85	2200	EST01272	M79123	HHCPK99				
2135	EST01211	M79064	HHCPH85	2201	EST01273	M79124	HHCPK99				

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SEQ. ID	EST#	GB#	Clone	SEQ. ID	EST#	GB#	Clone
2250	EST01304	M79156	HICP006	2392	EST01419	M79261	Clone
2251	EST01305	M79157	HICP007	2393	EST01419	M79262	HRBA006
2252	EST01306	M79158	HICP008	2394	EST01418	M79263	HRBA007
2253	EST01307	M79159	HICP009	2395	EST01419	M79264	HRBA026
2254	EST01308	M79160	HICP010	2396	EST01420	M79265	HRBA027
2255	EST01309	M79161	HICP011	2397	EST01421	M79266	HRBA044
2256	EST01310	M79162	HICP012	2398	EST01422	M79267	HRBA008
2257	EST01311	M79163	HICP013	2399	EST01423	M79268	HRBA011
2258	EST01312	M79164	HICP014	2400	EST01424	M79269	HRBA014
2259	EST01313	M79165	HICP015	2401	EST01425	M79270	HRBA021
2260	EST01314	M79166	HICP016	2402	EST01426	M79271	HRBA022
2261	EST01315	M79167	HICP017	2403	EST01427	M79272	HRBA023
2262	EST01316	M79168	HICP018	2404	EST01428	M79273	HRBA024
2263	EST01317	M79169	HICP019	2405	EST01429	M79274	HRBA025
2264	EST01318	M79170	HICP020	2406	EST01430	M79275	HRBA026
2265	EST01319	M79171	HICP021	2407	EST01431	M79276	HRBA027
2266	EST01320	M79172	HICP022	2408	EST01432	M79277	HRBA028
2267	EST01321	M79173	HICP023	2409	EST01433	M79278	HRBA029
2268	EST01322	M79174	HICP024	2410	EST01434	M79279	HRBA030
2269	EST01323	M79175	HICP025	2411	EST01435	M79280	HRBA031
2270	EST01324	M79176	HICP026	2412	EST01436	M79281	HRBA032
2271	EST01325	M79177	HICP027	2413	EST01437	M79282	HRBA033
2272	EST01326	M79178	HICP028	2414	EST01438	M79283	HRBA034
2273	EST01327	M79179	HICP029	2415	EST01439	M79284	HRBA035
2274	EST01328	M79180	HICP030	2416	EST01440	M79285	HRBA036
2275	EST01329	M79181	HICP031	2417	EST01441	M79286	HRBA037
2276	EST01330	M79182	HICP032	2418	EST01442	M79287	HRBA038
2277	EST01331	M79183	HICP033	2419	EST01443	M79288	HRBA039
2278	EST01332	M79184	HICP034	2420	EST01444	M79289	HRBA040
2279	EST01333	M79185	HICP035	2421	EST01445	M79290	HRBA041
2280	EST01334	M79186	HICP036	2422	EST01446	M79291	HRBA042
2281	EST01335	M79187	HICP037	2423	EST01447	M79292	HRBA043
2282	EST01336	M79188	HICP038	2424	EST01448	M79293	HRBA044
2283	EST01337	M79189	HICP039	2425	EST01449	M79294	HRBA045
2284	EST01338	M79190	HICP040	2426	EST01450	M79295	HRBA046
2285	EST01339	M79191	HICP041	2427	EST01451	M79296	HRBA047
2286	EST01340	M79192	HICP042	2428	EST01452	M79297	HRBA048
2287	EST01341	M79193	HICP043	2429	EST01453	M79298	HRBA049
2288	EST01342	M79194	HICP044	2430	EST01454	M79299	HRBA050
2289	EST01343	M79195	HICP045	2431	EST01455	M79300	HRBA051
2290	EST01344	M79196	HICP046	2432	EST01456	M79301	HRBA052
2291	EST01345	M79197	HICP047	2433	EST01457	M79302	HRBA053
2292	EST01346	M79198	HICP048	2434	EST01458	M79303	HRBA054
2293	EST01347	M79199	HICP049	2435	EST01459	M79304	HRBA055
2294	EST01348	M79200	HICP050	2436	EST01460	M79305	HRBA056
2295	EST01349	M79201	HICP051	2437	EST01461	M79306	HRBA057
2296	EST01350	M79202	HICP052	2438	EST01462	M79307	HRBA058
2297	EST01351	M79203	HICP053	2439	EST01463	M79308	HRBA059
2298	EST01352	M79204	HICP054	2440	EST01464	M79309	HRBA060
2299	EST01353	M79205	HICP055	2441	EST01465	M79310	HRBA061
2300	EST01354	M79206	HICP056	2442	EST01466	M79311	HRBA062
2301	EST01355	M79207	HICP057	2443	EST01467	M79312	HRBA063
2302	EST01356	M79208	HICP058	2444	EST01468	M79313	HRBA064
2303	EST01357	M79209	HICP059	2445	EST01469	M79314	HRBA065
2304	EST01358	M79210	HICP060	2446	EST01470	M79315	HRBA066
2305	EST01359	M79211	HICP061	2447	EST01471	M79316	HRBA067
2306	EST01360	M79212	HICP062	2448	EST01472	M79317	HRBA068
2307	EST01361	M79213	HICP063	2449	EST01473	M79318	HRBA069
2308	EST01362	M79214	HICP064	2450	EST01474	M79319	HRBA070
2309	EST01363	M79215	HICP065	2451	EST01475	M79320	HRBA071
2310	EST01364	M79216	HICP066	2452	EST01476	M79321	HRBA072
2311	EST01365	M79217	HICP067	2453	EST01477	M79322	HRBA073
2312	EST01366	M79218	HICP068	2454	EST01478	M79323	HRBA074
2313	EST01367	M79219	HICP069	2455	EST01479	M79324	HRBA075
2314	EST01368	M79220	HICP070	2456	EST01480	M79325	HRBA076
2315	EST01369	M79221	HICP071	2457	EST01481	M79326	HRBA077
2316	EST01370	M79222	HICP072	2458	EST01482	M79327	HRBA078
2317	EST01371	M79223	HICP073	2459	EST01483	M79328	HRBA079
2318	EST01372	M79224	HICP074	2460	EST01484	M79329	HRBA080
2319	EST01373	M79225	HICP075	2461	EST01485	M79330	HRBA081
2320	EST01374	M79226	HICP076	2462	EST01486	M79331	HRBA082
2321	EST01375	M79227	HICP077	2463	EST01487	M79332	HRBA083
2322	EST01376	M79228	HICP078	2464	EST01488	M79333	HRBA084
2323	EST01377	M79229	HICP079	2465	EST01489	M79334	HRBA085
2324	EST01378	M79230	HICP080	2466	EST01490	M79335	HRBA086
2325	EST01379	M79231	HICP081	2467	EST01491	M79336	HRBA087
2326	EST01380	M79232	HICP082	2468	EST01492	M79337	HRBA088
2327	EST01381	M79233	HICP083	2469	EST01493	M79338	HRBA089
2328	EST01382	M79234	HICP084	2470	EST01494	M79339	HRBA090
2329	EST01383	M79235	HICP085	2471	EST01495	M79340	HRBA091
2330	EST01384	M79236	HICP086	2472	EST01496	M79341	HRBA092
2331	EST01385	M79237	HICP087	2473	EST01497	M79342	HRBA093
2332	EST01386	M79238	HICP088	2474	EST01498	M79343	HRBA094
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2334	EST01388	M79240	HICP090	2476	EST01500	M79345	HRBA096
2335	EST01389	M79241	HICP091	2477	EST01501	M79346	HRBA097
2336	EST01390	M79242	HICP092	2478	EST01502	M79347	HRBA098
2337	EST01391	M79243	HICP093	2479	EST01503	M79348	HRBA099
2338	EST01392	M79244	HICP094	2480	EST01504	M79349	HRBA100
2339	EST01393	M79245	HICP095	2481	EST01505	M79350	HRBA101
2340	EST01394	M79246	HICP096	2482	EST01506	M79351	HRBA102
2341	EST01395	M79247	HICP097	2483	EST01507	M79352	HRBA103
2342	EST01396	M79248	HICP098	2484	EST01508	M79353	HRBA104
2343	EST01397	M79249	HICP099	2485	EST01509	M79354	HRBA105
2344	EST01398	M79250	HICP100	2486	EST01510	M79355	HRBA106
2345	EST01399	M79251	HICP101	2487	EST01511	M79356	HRBA107
2346	EST01400	M79252	HICP102	2488	EST01512	M79357	HRBA108
2347	EST01401	M79253	HICP103	2489	EST01513	M79358	HRBA109
2348	EST01402	M79254	HICP104	2490	EST01514	M79359	HRBA110
2349	EST01403	M79255	HICP105	2491	EST01515	M79360	HRBA111
2350	EST01404	M79256	HICP106	2492	EST01516	M79361	HRBA112
2351	EST01405	M79257	HICP107	2493	EST01517	M79362	HRBA113
2352	EST01406	M79258	HICP108	2494	EST01518	M79363	HRBA114
2353	EST01407	M79259	HICP109	2495	EST01519	M79364	HRBA115
2354	EST01408	M79260	HICP110	2496	EST01520	M79365	HRBA116
2355	EST01409	M79261	HICP111	2497	EST01521	M79366	HRBA117
2356	EST01410	M79262	HICP112	2498	EST01522	M79367	HRBA118
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2358	EST01412	M79264	HICP114	2500	EST01524	M79369	HRBA120
2359	EST01413	M79265	HICP115	2501	EST01525	M79370	HRBA121
2360	EST01414	M79266	HICP116	2502	EST01526	M79371	HRBA122
2361	EST01415	M79267	HICP117	2503	EST01527	M79372	HRBA123
2362	EST01416	M79268	HICP118	2504	EST01528	M79373	HRBA124
2363	EST01417	M79269	HICP119	2505	EST01529	M79374	HRBA125
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2365	EST01419	M79271	HICP121	2507	EST01531	M79376	HRBA127
2366	EST01420	M79272	HICP122	2508	EST01532	M79377	HRBA128
2367	EST01421	M79273	HICP123	2509	EST01533	M79378	HRBA129
2368	EST01422	M79274	HICP124	2510	EST01534	M79379	HRBA130
2369	EST01423	M79275	HICP125	2511	EST01535	M79380	HRBA131
2370	EST01424	M79276	HICP126	2512	EST01536	M79381	HRBA132
2371	EST01425	M79277	HICP127	2513	EST01537	M79382	HRBA133
2372	EST01426	M79278	HICP128	2514	EST01538	M79383	HRBA134
2373	EST01427	M79279	HICP129	2515	EST01539	M79384	HRBA135
2374	EST01428	M79280	HICP130	2516	EST01540	M79385	HRBA136
2375	EST01429	M79281	HICP131	2517	EST01541	M79386	HRBA137
2376	EST01430	M79282	HICP132	2518	EST01542	M79387	HRBA138
2377	EST01431	M79283	HICP133	2519	EST01543	M79388	HRBA139
2378	EST01432	M79284	HICP134	2520	EST01544	M79389	HRBA140
2379	EST01433	M79285	HICP135	2521	EST01545	M79390	HRBA141
2380	EST01434	M79286	HICP136	2522	EST01546	M79391	HRBA142
2381	EST01435	M79287	HICP137	2523	EST01547	M79392	HRBA143
2382	EST01436	M79288	HICP138	2524	EST01548	M79393	HRBA144
2383	EST01437	M79289	HICP139	2525	EST01549	M79394	HRBA145
2384	EST01438	M79290	HICP140	2526	EST01550	M79395	HRBA146
2385	EST01439	M79291	HICP141	2527	EST01551	M79396	HRBA147
2386	EST01440	M79292	HICP142	2528	EST01552	M79397	HRBA148
2387	EST01441	M79293	HICP143	2529	EST01553	M79398	HRBA149
2388	EST01442	M79294	HICP144	2530	EST01554	M79399	HRBA150
2389	EST01443	M79295	HICP145	2531	EST01555	M79400	HRBA151
2390	EST01444	M79296	HICP146	2532	EST01556	M79401	HRBA152
2391	EST01445	M79297	HICP147	2533	EST01557	M79402	HRBA153
2392	EST01446	M79298	HICP148	2534	EST01558	M79403	HRBA154
2393	EST01447	M79299	HICP149	2535	EST01559	M79404	HRBA155
2394	EST01448	M79300	HICP150	2536	EST01560	M79405	HRBA156
2395							

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NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the  
5 convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

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## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Venter, J. Craig  
Adams, Mark D.  
Moreno, Ruben F.
- (ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene  
Transcription Product
- (iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
  - (B) STREET: 620 Newport Center Dr. Sixteenth Floor
  - (C) CITY: Newport Beach
  - (D) STATE: CA
  - (E) COUNTRY: USA
  - (F) ZIP: 92660
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: 07/837,195
  - (B) FILING DATE: 12-FEB-1992
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 07/716,831
  - (B) FILING DATE: 20-JUN-1991
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Israelsen, Ned A.
  - (B) REGISTRATION NUMBER: 29,655
  - (C) REFERENCE/DOCKET NUMBER: NIH004.004CP1
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: 619-235-8550
  - (B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTTT GTTCCCTCA GGTCCCTTT TAATTGCTT CCTCATTTT CCTTAGCAGC ATCCTAGTTG ATGGTCTGGG  
TTATCAGAGG AGCAAAAACA TTTAAGTGT AAATAATGCT CATTGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

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AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTT TCCCATTTTA  
GGTCCCCAAA AGTAGGAGGT GGGGCCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAAG CTGCAGCCAC CATATGGGGC  
ACTCCTGGCT GGTGTACAGG GTGGGCAITG CCCAGGTCTT TT

SEQ ID NO:2: (Length of Sequence = 214 Nucleotides)

GTITTNCITTT TTCTTAGCT TCATTCTCT TAAAAACAA GGAACAAGAA AACATTGCAC CAGCGTTCTA AGCCTCAAAC  
AAAANACAAA ACAAATCCCC CTGCGAAGAA CAATAAACTT TACATCTCTT TGGCAACAAT AACITAAAAT CACCCAACCT  
CCATTGCTC CAACCACAGC AGTTAGTTAG TTACAAAAAT ATTCCNTGTG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT  
GGTACCCAAA TGGGTGGTGT GATATAAGAG TAACAAAAGG ACTGAAAGGG TTAAAAAGA AAGAAAAAA AAAAATCCCC  
TGTTTGGGAG GGTGTTAAGT ATCGAGTGT TTCCAAACC ATTCTCTCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG  
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCCT  
GATCCCTGTA TTATCAAGGC ACAG

SEQ ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGGTAA CCGAGGCGGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGGCT TCGTGGGAGG  
CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCACCGG GCTCCACTTG GAGATCAGCA GGAGGGCCAG  
TGTTGGGACCC CTGCTGCCAC CTCTCCTGGG CTGTGTCCT TTCTGGAAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG  
CAATAAGAAA CCTCGTGTGC CAGCTTCTTA AGGGTKGCAG TGCAAGACCC CA

SEQ ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCCITAC ATATATATTC ACAGAAAATC ATATTGCATA TACTCTTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC  
TAGGACACAA GGAAGCAGG CCAAATTTCT CATATTTTCA GGAATAAACT GAGTGCCCGG AAGGTGTAAT AGGAACCTTT  
TACTAACCTC ATCTGACTTC ATCCTCACAC CAGCATTTTG TGTTGAAGGA AACTGGCCGA GAGTGGTTAA GAAATATATC  
CAAAGACGTA TAGTTCCAAA TGGAACACGG ATCTTTTAT TAAATTTCCA ATCATCTTTC CATATATATCA GCCAATGATG  
GAGCAGAAAG CTGGTCCAGG CAATCCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG  
CCAAGGGGCC AGTGAGTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGNCA CCGCACTTAG GTTGTTTTGT  
GCCAGCTTT GGCAGGAAGC ATTCTCCTT TCAAAGATIN NAGCCTTGCG GTCATATATC GGGTGTAATA GGGTCTTTT  
TT

SEQ ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGTTCTC CCTCTTCAA TTITAGCAGT AATGTGATCC TCAAAAATGC ATTAATACTA GTTGAAGTAA ATAAACGGAA  
GAGCTCCAAA ATGCTGTCAT TAAATGCATT TTCCACACT AATGCCAATC ATCCAAAGCT ATTTTCAACA AGTCAGGTAT  
TCAAAGCTAT TCACACCACT TGAAAGAGTA ATTACATTT ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG  
CTTCTCATAG GTTATCTCAT GTACATTATG CCACTTINAC TTAAAATGAT CACAATTINAG TGCTATAGGT TTTTGGGTTA  
ATGTTTTCCT NGGGGGAGTT GTTAAAAACA TGGCATTTC

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)



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AACTTGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTTAG AAATCATTCG TCAAAAGAAR  
 AACCTGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGTTGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTC  
 AAACAACGTG GGATAAAAAA GGATTTTTC A TGCCATTAA ACAVCAATGC AACAGTAA

SEQ ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAAACTA TGTCCCTCCT TTGCTCAGAA ACTTTTAATA TCTKCCATT TCCCCATGTA AAAGCCAATC  
 CTCAACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GTCAGTCCCC CCAGCCCCAG TACTTGGGGA  
 CTTTGCCCTT GCAGTCCCT GTGCCAGCAA ACTCTCTCTC CAGATGTCCA CATGACTCAC CCNCTCCTT CAGGGGTCTT  
 CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCTGACCATC CTGTATAAAT AGCATCACCC TACCTCCTAT CTCTCTCTCT  
 AATGTCTCAG GAATTGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GTGAACAGAC TAAGGCCTTT NIGGAGGCC AGAATAAGAT TACTGTGCCA TTTCTTGAGC AGTGTCCCAT CAGAGGTTTA  
 TACAAAGAGA GAATGACTGA ACTATATGAT TATCCANGT ATAGTGTCCA CTTCAAGAAA GGAGAACGGT GTTTTATTTT  
 TTACAATACA GGNTTTINAGA ACCACCGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCGC CACCTGCTGG ACGCGAGGG CTACTACGAT GCCATGGTG TCTGRTTTT TTATTTCTCA GACAGGACTG  
 CTCTGTATNT GTCTTTGGAT TCTACGTAGA TTTATATTIG TAAATATTA CATTGTTCAT GACCAGAAGA AATGTCATT  
 TCGTAAAAAT TAGATTCTGG NGTCTATATA TGNAAGNAAT ACTAACTACT AACTGTTATA ACAWCAAAT GTGGGNTGTA  
 TATCTACARG CCNAGCCGA CTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGTGATA AAATGGTAG TTTCATGTTA TCTACAAGRC TAAGKTCAA ATTCCATGCA TGTCCTGRTA  
 AAAGACCCAT NATGGKCTM ACTGTACTTA CTCCCATTT ATTAGCATTC ATTCTGGTCA CCAGCTCTAG TTCTCTGCT  
 TAGCGAATCT CGCTTGCTT CAAGATGTCA TTCAAATGTC ACATTTTGTG GGAAGCCTTG CCTTTTTTGA CACGGTCTCC  
 CTGCCAC

SEQ ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCTTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA  
 AVTTTCTGTV VATVGVGCC ACTCAGCCTG TGGATACTGG CAGCCCTAGC AAATCATAAC ACACATACAT TTTAAACTCG  
 GTTTAATCCT GTGRCCATT ACTTATGGTT CAGTTTTTAA ATAGTCTTAG TCTTATGVCC ACTGTAAAG TTCACCAGGA  
 CATAGGSCAT TGGGAAAGG GGCCTGTAACT TCTTGGATTA

SEQ ID NO:13: (Length of Sequence = 339 Nucleotides)

VCTVCTVCC AACTTCATT AGATATGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC  
 CATTTTIVTR ATTGATGACA AATCAGGGA CATTCATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACACGT  
 TGATGGCTCA GGCGGTGGAC AGGGACACCA ATCGGCCACT GGAGCCACCG TCGGAATTCA TTKTCAAGK CCAGGACATT  
 AATGACAGTC CTCGGAGGT TTCCTGCAG AGACCTATCA TGCCAACTGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT  
 ACGGTAGTGG GGAGGCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

114

GGGVGCAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACCTCTTG GAAAGAACAG GCTACACACT  
 TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCTG TTTATYCAGG TCAGCAGCCT TCTGTTGGCA  
 CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAACT TGTTCATTAA TTTGAGAAAG CTGGACCTA  
 TATGGGATCC TCGTCTAAT GATGGATCCA CTCAGTGGTC TCAATAGAGG TTAATGCGIT TGTACATTTT TTGTACAAAA  
 GGAGCARGCT CAAGGAGGGC TG

SEQ ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGTTGATGC TGAAATTVAA GATCCACCAA TTCCAGAAAA ACCATGGAAG GTTCATGTGA AATGGATTTT GGACACTGAT  
 ATTTTCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGTTTYCGTC AGCGGATTTT  
 AACCAAGAAT GAAGAGCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCTAA TGCTGAAAAG AGGAAACATT  
 CGCCTTCGCC TCCCCTCCG ACACCAACAG AWTACGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG  
 AAGCCGCAAG AAGTCCAGAA AGAGGGWGG TTGA

SEQ ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGTT TCTTCCAGGA TGAGAAATCA GTGGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACACGGGA  
 GCGAGACCAT CTTAAAAGAG CCCCAGCCAA GCTGACCATG GGTCTGACCC CAACTGAAG AAATGCCAG CCCAGCCAAA  
 CCCAATTGC TAACCTGTAT TATAAGCAAG TACAATGGTC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC  
 AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCTGTCAGA GGYACCTTVG  
 GTTGGCAAAA CTTCAAAAAG AGGGACCT

SEQ ID NO:17: (Length of Sequence = 415 Nucleotides)

AGCAYGGGCT GGGGGCCCG GAGTAGGGC TGGGGCTTGT TTTACGCTCT GCCCCCCACA CCCCCTCCTC TTCCGTCTTG  
 ATTAAGCCCA AGGGTGGTG GACTTAACCT TCAGCCATC TCTAAGGGT TCACAGACTG GATCTTTCTA AACTTTATTG  
 GGTACCTGCT TCCCCTTTTC CCTGGTAGTT TTCACTTACA AAAAGTCAAA ACCTGATCGA AATAGAAATA AGATCATCAA  
 ATTGGACCAT TCTCTTAGCG TTCGAGTGTG CCGGCCAGAC TGGCATTGAG TACACGCTGA GATCCAAACA CATCAGACTG  
 GCCTCAGGTC ACCAACTCGC CACTCAGGGC ACAAGGCCTG CCCTGTGGT CACAAGGCTT TCCTTAATGT CGTCGGTGCC  
 CAGGTGAACC ACAAG

SEQ ID NO:18: (Length of Sequence = 356 Nucleotides)

GTATGTATGT CTGTAGGTAT TTCTATACTT AACCATCTGT GTCCCAATTA AGCTAAACAT GATTCATTCT GATGCCAACC  
 CCCATCCATC ATGCCATGGA TCGCTCTAGA CTTCTTCCCT TGTAACTCC CACTCAAACA GTGAGAAACC TTTGCCAGT  
 ATGTTTGGGA GTAACTCAC TGGGAGTTTG CAGTCCACT AGATGAATGC CAOCCATTT GTTCATTTAA AAGGACTTTT  
 GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGTTT ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG  
 GAAACTCTAG GGGCCACAAG GGTCTGGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TTTTTTTGTAG TTTTAAACCA CCAAACCAAT ATTTTYCCTT TAAATTTTAA TCTTATAATA TAGAAATCTT  
 ATGTAAATGA AATTTTGTCA TGTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT  
 AATTTACAAC TTACATTAGG GGTTTGGGG VATGCTAATT ATATATTGAG AATATACATT AGAACTCTTC AAAATGGGCT  
 CTCTAATGA GTCACTACT GAACATAATT GTTCCCTCTT CTGTTAAATA GAATAGGTTT AAATGACTAG TCCAAATGGA  
 ATTATTGCCT TCTKGTAA

SEQ ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCCATCAGCT GTTCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC  
 TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCTT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA  
 TTAATCAGAA ATTTTCAAAG CTGGATTCT AATGATATGC ATTATCATTA GACATTCAAA TGCTATACAT CTCTGTATGA  
 AGCCTCCTTG ACAGCAGCTA CACTTATTTT ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC  
 TTCCCCACTC TCCTCTTGGG GGAATGAAAA GATGTGGCGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGGCTAGGT  
 CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEQ ID NO:21: (Length of Sequence = 385 Nucleotides)

GTTTGATTIG CTTTTTTTTT AGAGTTTAC ATCAGTGTTC TTCAGGAATA TGGTCTTTC ATTTTCTTTT CTGGGAATAT  
 TTTCTAGTTT TACTTTGTCA GAGTAAATTC TGGCTTCACA GAATTATTTG TAGTCTCTCC TGTCTTGGTT TATTTCATGCT  
 GCTATAACAA AATACCACAG ACAAGTGGT AATAAATAAC ACAAATTTAT TTTTCCCAGT TCTGGAGGCT AGGAGTTCAA  
 GAAGCTGGCA AGTTCAATGT CTGGTGAGAC CCACTCCTTC ATAGGTGGCA CCATCTAGGG GTCCTTACAT GRCAAAGAGA  
 TGGAAGGGCC AAAAGATGG TGACCTATTG TGAGGCTTTT TTTAAAGGGC CTTVAAATCC CAGTC

SEQ ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCTTCATGG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTACGT GAAGGAACAG TTTGCCTGGA GACATTTCTA  
 CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCTT GCCACCTTAC  
 GCCGTAGCCG TCCAGAGACT GGCAGGCCTC GGCCTAAAGG TCTGGGAGGG TGAGCGACCT GCGAGACTCA CAAGAGGGGA  
 AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC  
 AGCAACCGAA TTCCAGTTTA GAGGCGGATT TVGGTGTGK ACGGTGTGAC CCAC

SEQ ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGTGA TCACCACAGC TCCGTTCTTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATTCTGA ATAATTTACT  
 GATCGTAAAG TCTAAAAGTA TCAATTTTCA GTGAGCAGTT TTAATCAGA AAATAGTCAA TAGTTAATCA TGACTCTTCA  
 GGGTATTTCC TTCACGTCTT CTGAAGAGTT TCCAGAACA TTCTGTGAA AAGGAATGCC TCCCAACAAT GGAGAGCAAC  
 AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGTTTATC TGTTCCTTCC AGTGGAGGAA  
 GG

SEQ ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTTGGCACAG GCAGCACGGA GTCCACGTGA ATCTCCACCC  
 CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA  
 CAGACAGCAG TCTTGATGCC TCGACGGGAC CCCTTGAAGG CTGTGATGA TAGGTTAGAA ATAGCAAACC TGTCAGCATT  
 GAAGGAATC TCACCTCCGT GGGCCTGAAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA  
 AGAAACACAA TGCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAAT GAGGCAGAAT ATGTCTTGAA  
 GAAAAAANTT GCAAGCCACA CTTCTNGAGA TTTTGTTCAA GATCCATTTC AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEQ ID NO:26: (Length of Sequence = 355 Nucleotides)

116

GATTGGTATA CGGGCAACAA TGGATTGATA GCCTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT  
GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCAGG  
CCACTKCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAATAAATG AAATAGCTCC ATCAAGTCAA TAATTTAAAG  
TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCACAA ATTAGAAAAT GTACAAATTA AATATTAATG ACCCATAACC  
CTATAAGGA AAGTTTAACC TCTCTAGTAT TTTT

SEQ ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCGTAA TAATTTACTG  
ATCGTAAAGT CTAAAGTAT CAATTTCAAG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG  
GGTATTTCTT TCACGTCTC TGAAGAGTTT CCCAGAACAT TCTTGTGAAA AGGAATGCCT CCCAACAATG GAGGAGCAAC  
AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAAGA GNGTTTTTC TGCTTTCTTC CAGTGAGGAA  
GG

SEQ ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTTATT AAAGGACCAC CCTGGCTGIM GTGAGATGAA TGGATTCAA CAGGGCAAGA GTGGATACAG MGAGATAAGT  
TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA  
CTTTACACTT TTTTAGATCA GTCKATTCTT GATGTCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT  
ATATTTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCTGGAA GCAAAGGAGG ACCTGGCTCC TGACTCTCAG AGAGGATAGG CTGGGATCCC TGGGGCAGGC  
CTGTTCCTTG GCTGGCCAAT TTAGTCTTTC AATTGTCTAA GGGCTCTCCA TTGCCTGCCC TTGCCTCTTT CTAGCCTGTT  
ATTTCTAGGC TCCTCTGAAT AAATCTCAGG TTCTCTACTG TCATGCCCTT AGTTCAAAA TGAGAATCTG CCTACAGTG  
CTGGCCTCCT TCCGGCTGA AAGCCAGCAC CTTCGACCC GG

SEQ ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTC AAGACACAAC ATGGCACCTG TGCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT  
AATGGGTG CAGATGGGGA AGGCAGCTTC TCTGCAACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG  
AAGGGAAAA CAGCATGTGT AGACAGGTAG TGACAAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAAGGGAA  
TCTACGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA  
AGGACCTGTG TCCTGTTAAC CATTT

SEQ ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATGG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAATGAC ACCCAAAC AAGTGTCTA CTTAGCTTCT  
ACAATAGTTA TTCCTAGACC TTAGATTAGT CATTACATTT TTATTTAAGG TACTATGTTA CTTTCATGAC TACAAAATGA  
GGCACTCGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTGTCTTT ATGTCGTATT AATGCCAAG ATATTGTCAG  
GGATTATTTT AAAGAAGCCC TTAATCATGA TGGCTATTTT TAAAAATGCC ACAGGACAGT AACAGGCTGA AAAGAAACAC  
CTGGTTTGAG GGGCCAAATT AAG

SEQ ID NO:32: (Length of Sequence = 153 Nucleotides)

117

ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC COCTGAAGGN GGGGGTTGA GTCATGTGGA  
CATCTTGAGG AAGAGTTTAC TGGCACAGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAGCTTC AGGACAAATT GTACAACTT TACAATGTGG GATTTAAATT  
TAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GNTACCAGGA TIGAACTTA TAATAATCCA  
TGIGTGAAAG GGAGTCTGT TTCCTTTCAA GIGCTTTTAT TCTGCTATGG AACAGTCAA ATGGAAGNTG TAAAGCTTTG  
TGGTTAGTTT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCCAACCA TATCTAATCC AACAAAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCTTC TCAGCACCCC  
CACAGCTGCT GCCCCAAAGG AAGCCACGTC ATCTCTCAG GAGATTGTC AGCAGCCACT GCCTCCTTGT CACCTTCGCC  
TGIGTGCAAT CTCCCCACAT GGCCAGGAA TCGTCCCTGT TAAAGTCTGC TAGGTCACGG TCCTTCCTAC TCAAAATGCT  
CCCTTGCTC CCACTGCCCC CAGAGTAAAA AGCCAGACC TTCAAATGAC ACAAGGCCT ACAACGA

SEQ ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGTC ATCAGATGCC TGCTINGATA TATATAAACA GTAAAAACAA CTTTCACTTC TTCCTATNT AATCGTGTGC  
CATGGATCTG ATCTGTACCA TGACCTACA TAAGGCTGGA TGGACCTCAG GCTGAGGGCC CAATGTATGT KGGCTGTGG  
GIGTGTTGG GAGTGTGTCT GCKGAGTAAG AACACGNTT TCAAGATTCT AAAGCTCAAT TMAAGTGGA CATTAATRAT  
AAACTCAGAT CTGNTCAAAA GTCCG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTTTGGA AAGACTTTGA CCTCTGAACA AAAAGCCAGA AGGCTGCTTA AAGAAATAGT AAGGGTTTCA CTGCCCCTGG  
ATAGTCACAA ATCTAGGAGT ACTGGTTCAC TGCCTTGGGT TACCAGGTAT CAGCTCTTC ACAATCTCTC CTCTTCCCAT  
GCTTCCCTT AAAGTCCAGT TGACAAATGA AAAAGAAAAA AAGGCCTTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA  
ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT  
AGGGACCAGG GTGCCCAACC TGTAAATTTA TTTCTAATT TTATAAATAT ACTCCTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCAT ACAGGAAGT ACAGGATTG GCTTTTCTAG ATGTCATATC CAACTTGC AGTCATGAGA ACAAAGTGT  
TGCCAGCAG GCCTCTCTCA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCGA TACAGGCAT CATCCCATCT  
CTAATTTCCC CTCTGTCTC CATCCAGCG CTCTTCCGC TTCAATCTCT ACCATACCAC TTGTGCATGC ATGTRATGTT  
CTAATACCA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTCT AAACCTATAG TTAGTGTGAT CATGACTTTG  
GTCAAAGGA AGTYTCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCAG  
AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCGCGTGTCT GGGCACCGA GCGCTCCAGA TTGCGATGTG  
TGCCCTGTG ATGGTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATG CCAATGAAGGA ACTCAAGGCC CGAAAGATCC  
CCATCATCAT TCGCGTTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTGACGAG CTCATCATCA CCGACTTGAG  
CTGGAGTCAT CTTTCTGMC CTTTGCCCCA TGCCC

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SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCTGAACC CGTTTGGGA AATAATGGGA TTCCTGATC ACGGGACAAC GAATCACCCCT GAAGTTTTTC  
 TCCAGTTTAC TCACTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGGCTAA  
 TACCATGCTA GGCATTACTT GGGAGTTAT GAGTTGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACAGTAA  
 TTTATCAAAG CCAGTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTGGGG GCTAGAGATA CACATGCCAG TACTATACAT TTCTCAGCAC TGTGCTGTG ATTACAGCA GTTCAATTGT  
 TCATGCGATA TAAGCCAGTC ATGTGGCCCA AGTTATTCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGGCCT  
 GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TGCTTTTCTT TAGAAATTTA GGGCAGTGTG ATGCTTCCAG AGGTCTGTAC AAACACCAGC TTTCATTGTG CTGGGGAGTT  
 TCCATGCCCT TYCCTTCTCT TCGCTTAGTG CAGTITCTG CTTTTATCA GTTGTACTGC CTGAGACTGA KTCCAACAAC  
 CCAAACGAA CGCTCAGCTC CTCTTTTCA AAGGAGGATG ACITNTCTNA ACAACTATTT AGGTGAATTA TTKKACAGT  
 TTATTAAAGC AATGGCTCTA AACAAATTC ACTGGGGGTG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG  
 GT

SEQ ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACTTTGGC ATTTTATTC AGACACGTAT AAAAACAAAA CAAAAACTT CAGTGATACA ACAGACGTTT TCCCTTAGTT  
 CCCCATCCAA GGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTCTG TCCTACCTGG AAGCTGTCTC ACTGCTGGAT  
 GAGAATGGCT TCTAAAAGTG GATCTTGGGG ATCTTGTGA ATTTGCCCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA  
 TGTGGATTAT GGTTCACACA AAGATGTCCA GTTATTTT

SEQ ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAAGAGGA AAGTGGAAATC TCTGTGGCCC ATCTTCAGGA  
 TCCACCACCA GAAAACCGT TACATCTTG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA  
 TTAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAATGG TAAAGCAAG GTTATGTGTA CTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTTCC AGGTGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CGGCCATTTT  
 TGGTGAAC TGATGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGA CTCAACCGG  
 CCCTKGGTAG CTTACAAGGC GGTGGTTTTG GGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGGAGAA AGGKGCATAG  
 CATCACGGGG GGACCGGAAC AGCCGCTGG CCGTGCAAMC TCGGGGGACT GGGATGGGCA AACGC

SEQ ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCTNNGC CTAATTAAAA GATTCCATTA CATTTACTTT TATCATTTAT ACTGCCAAGG ATCAGTCACA  
 AAAAATTCAA ATTATACATA TTATTCATGC TTAAATTCA TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTTCA  
 TAACATAGGG AAAAATTACT GTTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTTGT  
 CAAGTTGGKA CAGGTTCAT CGAT

SEQ ID NO:47: (Length of Sequence = 175 Nucleotides)

119

GATCTCTTCC AGCGTCAATG TACTGGGACA GCAAACACTC ACATTTGAAG TTCTTCTGG CCACCGGCTT CCCAGTACAT  
TGACGCTGGA AGAGATCATC TCAAATGGTT CTCCAGTGTG AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCCTGGGGTG  
GCTTGTATGG GAGCC

SEQ ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCTGTGAGA GGNACCGGGC AGCTCAMRCC CACAGCGGCT CCTCATCTC TGTGGTGGCA TCTCAITCC ACTCTCATCT  
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATCC TGTTCCTCT GCTGTAACCTG CTCTTTTCC  
TTCTGGAGCA CACGAGGGC TGACCGCAGC TGTGTGAGCT TCCGCTTACT TTMIGACAAC TGTACCAGGC TAGAATCCTT  
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEQ ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAAACCC TTGTGGGGGA AAAGGAGTGA GTTACTTGG TAAAATAATA  
ATGTTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCGGGGAAAA GAGTTGGGGC AGTGAACCTC CCAGGCCGAC  
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCCTAC CTMCTCTGCC AGTCCCTGC CTAGGAAACC TATCCCAGGA  
CACCCCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTACCTG GTATTAAAC  
TATTTACTGT TAAAAAATCT GTGACTTCAT GGAGTGGG

SEQ ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GMGAGKCTCC AGGATGAAGG  
GGAAARAGG CCGCATGCCA GTCACCTGGC ATCINCCAGA GAGGGYCAGY CTNCCACTG AGACTGGGGC ACGAGTCCCG  
TCATCACCAT GCCCTCTGAC TGTGAACTG TCTTTTACC TGACAAATAC TACACAGGTA TCGMTCTGG CCATACTCTG  
CTATCTAAAC CCAGGAAGT ATTAGATTGT T

SEQ ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATTG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGGG  
CACTGGCAGG ACGCAGCACC CCGGACTGG CCTTGGCAG GCTGCACCGG GCGCATGCGG GTGTGGGCCA GGGTTCCTTT  
AGGAAGCAGG TGGGAGTCTK NCACGTGCAG KCGGTCCAGG ASKGYACCAK GCCTGGCAGG GCACTG

SEQ ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGGG CAGGGTGCAC ACACACACGT GGGTMCCTGGC  
TGGGTGAGGC AAGCAAAACC TGCTGCACA TGGCAAGGG ATGTGGGAAG TATCCATGGG CNCCAGGGGA AGCTGCAGTT  
TGGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGG CCACCCACT GGGGGTCTCC AAGTGGTCAA GTTCCGTCTG  
CCAGGTAGA AGCTATGATG GGGGCTTCTA GGACACTNGA GGCTGACCTG AAAGCAAGGT ACTTTTACA CTGGGACCTT  
GCAAGAGGCC AACAAGATTA AGGGATGCTT CAGGTGAGAC TTGGCCCTCT TCTTATGGG CAAGACCTTC CCGCAGAGT  
TCAGATCT

SEQ ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTAA AACTAGGTCT TCCCAGGTAG TTTGAGGAGC  
ACCAGGGCAC ACTCAGGGAA GGGACATGTC AGTGTCTGAG AGCTCAGGG AGGAAGGTGT AGTGACAACA TGGACCATGG  
TGGAGTGAAT TTAGACGGCT CTGGGTNAG GAGAATCATC ATGTAAACA GCATTAAATC ATTTGGAGAA ATTCAGAAAA  
NTCTGATAGT TACATCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTTGAAT TCGG

120

SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTTAT AATGTTATAA GGGGGTTGAG GGGTGTGCA CTGGAGCAGT GGTTCCTCAA  
 CTCGTGTATG CATAGGAATT ACCTGAAGGG CTGTGTTAAA CACAACTGC AGGGCCACC CCCAGATTT CTGGTTGGGG  
 AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTACAAGC TCCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA  
 CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGG

SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTT TYCGGGGAR GTCAAACATA CTTTTTCAAC ATAGGATKTC TGACAGGAGG CCCTTGGMCA GGGTTCCTG  
 ACCTCTGYTT CAAACCCAC TGGAAACAGA GCAAAGTCAT CAMGAAACC CAGGACACCA GGGCAGGGG GCTGCACAAG  
 GTCGGGTAGG TCACAGTGGG CCAGCACACA GTGGCCCCGC CCAGGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA  
 KGCAAGCTCA TT

SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATTCT AGAAGGAAA GGCATGGTGG GAATTCAGCA CCTGAAGTTG TATTTACACC AGCCTCGGCA  
 TCTGGCAAGG RAATAGCGAT TGTTCATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAACCTG  
 ATCTAGGGAG ACTCCAARGA TCCAACAG

SEQ ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTTGAAGAAG CTGATAGCTT TTACACAGTA  
 TTAGATTGAA ATAATGGACA GAAACACATT CTGTCAAGA AAGGGGGAGA GAAGTCTGTT TGCAAGTTTC AAAGCAAAAA  
 GCAAAAGTGA AATGATTGA GGATTTCTGT TCTAATGGA GATGATTCTC TGGTTGTTAG AAATGGCAAA TATTGATGAT  
 TGTGTGCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTCGTCTC ACTT

SEQ ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTGCTCTCTC AGTGGTCCC TTCCCTGAAG TGCTCCCTT CTCATTAATT ATAGCCTGTG  
 TCTGAACATT GTGAGCTATA AGAACCTCA TATTAATGGT TAAGGGACTG TTGGAATGA TGTGATTTTA TTAATAATGG  
 GGTCTTTGTG GAGGATCAG GAATGGTCAA AATGAGCTC AGGTATGGG CTGCTCTRT GCTCCTGATA CCAAGGGTCT  
 GGCAAGCACA AAGGAAGGTG G

SEQ ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CTGAAGCCAC TATATCTGCA TATGTATCCC AGATTTGAAC AATTAAGTAA AAAGATGGTG AATGATGAAA  
 GCCAGTTTTT TGTCTGTAGA AGTGAGAGGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA  
 GTGTAGTTCC TGTGCTTTT AGTCTTATAG ACTTCATTTC CAAAGTTTCT TAGCACCCC CTCCCCCTT TGGTGAGGTT  
 GTTTCACATA TTTCTAGAC AATTAGATT TTTGTCAA GTCTGTGTC CATCCGGAGA GCTCTGATC TCTTAAATGA  
 TTTTTTAAAT TTACATACAT TAAGGTTTAC TCTGCTGTAA AGGTCTGTGG GTTTTAAATCC TGTCTCACAG TTTTTCATA  
 TGTGCTCTT CTGCTGGGA ATACTCTCCC AGATATCCC CATGACTGGC CCCTTATCTT CAATCAGATC

SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GTGTTTCAAG GGAAGGCAAC TMCAAGTTG TGCAGCTGAA TTTCTGTAAA GTTAAGACAG ACTCAMCTTC TCATTCAATC  
 TGGGGCAGTG GATAACCTTT CTGAATAGAC CCACTTGTTC ACGGACAGGG ATAGAGGTTT GCCTTCTTTC TTTCCCTTGA  
 TTTGGAGTGA GCACTAGGGA GGGGAAGTGC ATGGGTGACA TGAAGAAGGT GAAGATGTAG TAAAAGCATC ATCCAGGTAC  
 ACATTAAACG TGCTGCAGAA TTTTCAAT ACAACTGAGG GAGTCTGTAG TGGCAAAAGC AATTACTGAG CACAAAAGCC



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AGTCTCAAG GGCTGATTCC ACCTTCCCTG TCCAGGGACT TTCTCAGCAA ACTTTGTTCA TGAGCAGTTG TTGCTTTGA  
TGGTCTTAGC CAGTTTTTGG TGCAGGGTG TTCTCTGGT ACTAGGGCTA GGCAGCTGT TTAAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCACT GGAACCAGAG AGCCCTCAG GGCAGGTCGG  
GCTAGGCCA GCGCCCCCGC AGGAAGAGTC CCTTCTCTT GAAGCAAAGA GCAGAGGACC CACCCACCA GCCATGGGCC  
CAGGGGATGC CAGACCTCCT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CCGACAGCCC TCCACCAAG  
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGCG AGAAGAGCGT GCCAAGTACC TGGCGGCCAA  
GGAAGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGCG CCGCTGCCGG  
TTTTAGGGAG CAAACGTCTT AAAGCCGAGC AACGCCGTTT AAGCCTTGA GGAACGGCTA GCGGAAGAAG TTGTGGAAA  
ACAAGGGCG T

SEQ ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTGAGT ACGCAGAGCT CAAAACAGAC GTGTTCCAGA GCTGAGGGA AGTGGGCAAT GCATCCTCTT CTGCTCCTC  
ATAGAGCAAG CTCTGTCTCA GGAGGAGTC TGGATTTC TCCATGCCA CCTTCCAA ACATCTTGCC TAGAGTCTAC  
ATCAAAGAGG GGGAGCGCTT GGAGGTCCG ATGAAACGTC TGAAGCCAA GTATGCCCG CTCCACCTGG TCCCTCTGAT  
CGAGCGCTG GGGACCTCA GCAATCGCC ATTGCTCGG AGGGTGACCT CTGACCAAG GAGCGCTGT CTGTGGCTGT  
CCATGTCTGA GGTATCTCTG ACCCGATTG GAGCTACCTT CAGGACCAT CTGGCGGGC CACCGCCACC AATGCGTATG  
ACGTGATGA GTTTTGTAGT TCACTGCTGT GAGCGCATGA GTCGTGTACT GAATCCTGTG GACAACGGTT AAGTTACA

SEQ ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAAGT GGGGGTGGG CAGGGGGCCA GGCCAGCAT GCACCCCAT TTTTTTGGG GCTGATCCCT GCCCCAGCTC  
TGCTGATACC CGGGGCCACA GCGTCAGGC GTTGGGGTG GAGTAGAGG TGGGAGACA GGGGAGAGAG CCTKAGGAGC  
CACAAATGGG CAGACAGAAG CGG

SEQ ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATTGCA CCTTACAGAC TTAGGGAGCC TTTACCAGAG ACGCCTAAAA CGCCCGAGT TCAGCCATTG TGCTGAATAG  
AGTGAATAT AGAACCAGG ACAGAGTATT TCATTTAACG TTGATATATA CTGTCTAAG AAACACTAAC AATACTGTAA  
CTTTGTAA GACATAGTA TTGAAATGG AAATAGAGGT CAGGCTACA TCATCTTAGT TTAATGCTGG GCACTTTTT  
CTGATTTCTG TAGTCCCTG GAAATGTGT CCTTGTACC CATAAAGTGG TACAAATGCA TTTGTAACCA TTTTIG

SEQ ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGCGAC TCCAAGCTCT CTGTCTGGCT CCCAGCTGTG GGAATCCTTT AGGCTTGTTC TCAACCTACA  
CGTTAAAAAT GCTTCTTGGT GTGTTTGGG AGGGGAGAG GGAACTGAG CTCTCTCTTG ACCTCCTCCA ACACCTTGA  
CTTGCTTACC CAGCCATTTT CAGTAGCTAC ACGGGTGGT ACAGAACACT GGGCGGCACT CCGCACACAA CACAGAACCG  
GGGCACTCA TGCAAGTGG GGAACACATG TCGGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAACCGA  
GGAAGGATTC CCTTCAGATT CCAAGGATGC CACAACCCCG ACGGCGGCT TAGGGAGGCA CCGATTATCT AAGGAAAAAG  
GCCACTGTTT G

SEQ ID NO:67: (Length of Sequence = 413 Nucleotides)

CTGCTCCTTA TGTTTTTATT TCCAAAGTTT AGAATTTCTT TGCTTCATAG TATTATTTTA TTTTACTAAA TTACAGAGTA  
AGAAAAGCTT TTCATTTTAT CTGATTTTAT TCTTAGAACA AAAATATTAC GATCTCTAT ATTTTGTTC TTTTGCCAA

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AAGTGTAGGC AATTTTACAT CATCTTTTTT CCCAATCAGT TTGTGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT  
 AAATGAAACA GAAACTCCAA GGCCAAGAAG TGTCCATCTT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA  
 TGTGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGGT GCTGGGGAAA ACTGGCTAGC  
 CATATGTACT TTA

SEQ ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGTTAA AAGACCAACG TGTGTGNTC AAATATAAG GCCACACCTT TCAGACCGAA CCTACTCAA GATCCTTTAC  
 TTTGCAATAA TTGAACTGG AGAACCAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAA GGAAAGACCT  
 GAAGGAATCC ACCTGCATAG GCCACGCTT CCACCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAG  
 TGCAAGTCTA ATTACCTACC AAGGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA  
 AACCATTAA AAAACAATCA GGCAGAAAAC AGGAGTTAA TGTTTACATA TG

SEQ ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGCGTCCT TCTTATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT  
 AATTTTAGTG GAACAAAGCC TGTGAAATGA TTGTACATAG TGTTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT  
 CAAGGCACAA AACCAGTTCA TGCTTAACCN TTTTTCCTT TCCTTCTTTT GCTTTTCTTT CTCTCCTCTC ATACTTTCTC  
 TTCTCTCTCT TTTAATTTTC TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCAGTAGT GGATGGGTTT  
 CCCACTTCTC CTCAATCCGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEQ ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGGCAGCC ATGTATTAAAT TGTACATCCA AGGAAACTGT GCCCCAGGGG TCTTGTGTGT ATTTCTGAGA  
 AGAGGGGTGA GAAAAGGCAC TTGTCAACA TTGTCTCTG CCTGAACGTG CACCTCCAG TGCTCCTCCA TCAATTAGGA  
 GAACGTCTTT GAAGAATGCT GCTCAGCTT CTGAAGAGAA GACCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG  
 CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGCCC CAGTGGAGG CTTGGAGCTT GTTGACCANN GCAGCAGGAG  
 ACCCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTTGCC TGAGGTCATT CACATGCTTC AGCACCAGTT CCCATCTGTT CAGGCAAATG CAGCGGCCTA CCTGCAGCAC  
 CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTTAGGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA  
 CAGAGTTTTC GAAGTTCAGA AGAATGCTTG TGGTGCCCTT CGAAACCTCG TTTTGGCAA GTCTACAGAT GAAATAAAA  
 TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTTGTTC GCGTGTGAG AAAATCTAT TTGATGCAGA AGTAAGGGAG  
 CTGTTCACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAAT GACATTCATT CGAGATGCTC TCTCAACCTT  
 AACAAACACT GTGATTGT

SEQ ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTT ATATGCTTCA CTTAGGCTTT CATTGAGTA GACTCTAAAA ATTCTGCCTT GCTTAAGTNC TAACACTGCC  
 TCTCAGATT CAGTTTGGGA CATTGCACAA CTAAGACCTT TTAAACGCAT TTNCITGCTA ACTCGGAAGA CACATAGTCT  
 GCAGCAAGAC ATTCCTATAT TGAAGAAATG AGAGAAATTT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGTT  
 GCATTAGTTC CCTCGAAGT ATTGAAAAAN CTTTGAATG GGAAGGAAAA TTTTGTGCAC CTAATGTTCC TGAGGTACCC  
 AGAATGTCTG GGGGTT

SEQ ID NO:74: (Length of Sequence = 402 Nucleotides)

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GTGCTCAGTA AATACAAAT GGATGGACTA GAGAGATAGC CCGGAGGACA CTGCCAAATA AATAACAAAT TGTGCAAGCA  
 GCAGGCGCT GTAATTAGAC CAAGGAGGAC AGTCAGTTAT TAATATCAGA CACGTGGCAG GGTTAACAGC CACTGAGGGT  
 GGGTACAATG AAGAGAGTCA CTTTCTGCAC CCTCAGGGAC TTCCCTTG TG ATGGCCTTCT AAAGAGGGCT GAACAGCACC  
 AAGTGGCCTC GCTGCTCTG GTTCTGCTG CCTCCGGGT GCCTTGGGTG CCCCACAACT AGGGCCCTGG GTCCCTCCCA  
 TGTCCCTCTC CTCTCTACAA CCCCCTAGCC CCTTATCTGG CCAGCCATTA TGATGCCAT CAGTATGAGG CCAGATGAGA  
 GT

SEQ ID NO:75: (Length of Sequence = 454 Nucleotides)

GGACCCGGG CCGCGATGT GGCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGT CTAGTAAATA CCGCTTGCTG  
 TGTTTTATG TTGGTGGCTA AGCTCATCCA GGTATATGTG TTTGGCCCTC TCGAGTGAG TGAGAGACAG CATCTCAAAG  
 ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGA AGAGGTGGTC  
 ATGTGGTGCC TCTGGTTTGC CGGACTGTGC TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTCGATTG AATATCTTTC  
 CTTCTGNNC ACCACGGGA TGAGCAGCCA CCGGTGAGT CCGTCCCTG TTTGGTTGCC ATGCTGCTTT TCTGCTGTG  
 GACTTGCGGC CGTTTGCTCA TTACCGGGTA CACCAAGGAA TGCACACCTG GCTT

SEQ ID NO:76: (Length of Sequence = 313 Nucleotides)

GCTTTGATAG CTAGTTGTCT AAAAGTGTG NITATTAAAT AATCCACCTN TTTCCCACT TAAACATCC CTCTTACCAT  
 ATACTAAAT CCNGTAGCCC TGGGTCTGTT TCTGGACTCT CCGTCTGTG TGACCCCTC CAGGTACAC TGAGTGAGGT  
 AATGGTGGC TGAGAATCCT CTGGGAATCT GGCAGGTC CCCCNGAGCA GTCCACCCN CAATCATT NCATCGTTCA  
 GAGTGGNCTG AGTGNCTCA CACATCACT CTGCCAATG CACTTTAGGA ACTGTCAAAT TCCAAAGTTT CAA

SEQ ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCCGTA GCCTAAGTC GTTTTCCAA TTAGGAAGC TCACAAGCA GATCTGCATT GTCACGTACC AGCTGTTGT  
 GAACCTTTGT AAGCTGTTC AGGTGTCTT CAAGAAAGGA AATCTTCTGC TTTTGGGAGT GAATCCCCC ACTGTCTTCG  
 GGCTCCATTT CTGCACTTTT CTTGACTCGA GTGCTGACGT CTTGAACGAA CAGCTTGGCA AGGTGTGGC SGGTCTGGAG  
 TTCCCGGGCA ACTGTCTCTT CCAGACCTT GAGGTCTGC TTGTGACTGC TCAATGTGC TCGTACAGAA ATGTACGCTC  
 CTGCACTTT GGTGCTCTT TCGTGGTTCT TCGCTCTTTC AGCTTTCTCG TAGTCAAGCC TGAAGGCTTC TCTAAGCTCT  
 AACTGGAGCT TCTGATTAA GGTCTTTGA GCTCATCAA TGGTCT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCCGGTGGC GCAATGGAGA GAATGTGCCT GAGACAGAGC GCCTGGCTGG GGAGGAGGCA GCCCTGGNG CCGAGCTCTG  
 TGAGGAGACC CCGTGAATG ACAACTCATC CATCGTGGTG CGCATCGGC CCGAGGAGCG GCAGAAATAC GAGGAGGAGA  
 TCCGCGTCT CTATAAGCAG CTINACGACA AGGATGATGA AATCAACCAA CAAAGCCAAC TCATAGAGNA GCTCAAGCAG  
 CAAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCGAG GAGACAACGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTTCCTGC CTGGGAAGTG ATGACTCGCA GGTGGGCTT GCGGCTGGG GCTCCAAGCT GGGTGTGTG GGTAGGTGGG  
 GGCGGAGACT TGGCAGGAT GACCTTGTT AGGCTGTGTC CATTGGCCAC AGGGAGGAGG CCAGGGGAG CCCGAGCACT  
 GACGTAGCCA TTCCCAACAG GGCTGGGGCA GGCTCCGTTA GCACTGTCA GGTCAACNC CAGCATGCCC  
 CCGCACTACGCT GGGCAGGCA GGAGACACAC TGTCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

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ATGATTTCTT GCCTGINATA ACCTATGCAC TCACAAAGAT GAACTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC  
 GAAAGTATTT CTCTTTTCCT GTATTCITTT TCAAAGTGCC GAAACTGGGC TCGGAGATAA TAGACTCCTC AACCAGGAGA  
 ATGGAGAGCG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC  
 TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTGTGGTGA ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC  
 CAGGTGTTAC AGACTCGCCT GGTNGATGCA GCCAAGGCCC TGAAACCTGG TGCACGCCA CTGCCTTGAC ATCTTTTATT  
 AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTTTAAAT AGAGACGGGG TTTAACCATG TTGGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG  
 GCCTCCCAA GTGCTGGGGT TACAGGTTTG AGCCTCTGTA CCCGGCCCGG CCAAAGACTG CCTATTCTAA ACGTTGCTGA  
 GGACGTGGAN CAATCACAGC TCTCCTNTCT TTCCAGTGGG AGTTTAAAT GGCACAACCG CCTGAAAACC GTTTGGNGAT  
 TTCTGT

SEQ ID NO:82: (Length of Sequence = 394 Nucleotides)

GGGAACCCCT AGCAAAATAT AATGGTACCG CTATTATCAG CCTGTGTCGA GGCCAGGGA TTTTGGGGGA GTTCACAGTG  
 TTCTGGAGGA TATTCCTCC TTCCGTGGGG GAATTTGCTG AAACATCAGG NAAACTGACA ATGCGAGACG AACAGTCTGC  
 AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA  
 GTNAGGGAGG AGTTCTGAGT GAATCCAGCA GCACTNCCAA CATCACGGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT  
 GCCTTTTAC ATGAGGCAAC TTCGAGTGTC AGAAGCACAG AGGGNTAACA TCACAATCAT CCGTTCCAGT GGAG

SEQ ID NO:83: (Length of Sequence = 308 Nucleotides)

ATAAGACCAT TGGCAAAGGG AGAATTCATG AACTGAAAGA TCTGAAGTAA TTTCCAGAA TGTAATGTTA AGAAATAAGT  
 TAAAAGGCAG AGCATAATGA GTCTAACATG TGTGATTGAA GTCTTATAAG GAGAGAATTA AGAMCAGGCA ATATTTTAAA  
 GGRATAATGG AGAAAATGGA ATAATTGATG AAATATGTTA ATATATATAG GGACCATATG CATATGAMGG CCGGGGGTTA  
 AATAAAACGA AATCTACTTG TACATACITT ATGGGATTCC TGCAGCCCGG GGGGATCCAC TAGTTCTT

SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTTACTTA ATGGCAATTA AAATCACTG GCAAAAAA TCACTAGAGA TGTCACTCCA TTATCTTACC AAATAGTGTA  
 TTTTACCAT CTTTACCTA CACCCCTGAG TAAGGTGGAA TAGGTAAAG TTACTGGCAT AATAACACTT CATGAAATC  
 ATGATAGTAT TTAACAIGTT AAAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT  
 TTCATAAAAW TACAATAGGT CATACTARAC TTTGACTAAA ATTAAGAATG TKTTTCTKTC ATAATAATGC AGG

SEQ ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCCGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA  
 TATTTAAAGT CAGCAATAAA GTCACGTGGC TCCAAGRTAA TACATGTTGC CAAAGAGTCA TGCATGCCCT CCTGATGGGC  
 TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGCAGTAT GAACTTSTGG GAAGGCTTTA CCACAGTGAC  
 ACAGTAAAT GTCTACGTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCCCT CCA

SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

AAAACAAACC AGCTTTAATA CCAATATAGT TCTCTCTTAA ATACCGTGT TCCCAGGACA AATGCAGGGG CAGGCTCTTG  
 GCAGAAAGAG TAGAAAGGAA ATGTGGAACA AAATGGAATG GATGGCCCCG GCCCAGGGTC CCTGCCTTGG GCACTAGGGA  
 CTGGGCTGCC TCGGGGATGG GGGAGTGACA GCAGCTCCCC CTGGTCCAGT TATTGCAGAG GCGTGGGGG CTCCCTCCC

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TCCCCAGGCC TGAAACATTT CTCAGGATTA CTTCTGACCT TCAGCCCCAG CAGGGCCAGG GCCTGGGCTC CTCGTGGTCTA  
GGATGGGCCC CTTTGCCCAA AAGGGCCTTC AGCTAAGGCG TTGGGPTGGG CGGGGAGCCC

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTGCA TOGATGGTGA AAGAGATGTC AGGAGCACTT CTCGTCTGAG GTGGCTGAGA CGAAGAGGAC  
TCTGCTGCCA GCCTTGCGC ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCOGGTTT GAACTCTCAA GCATGCTCCT  
GGTAATAAAA GGACTTCCTG AGGAGGGAAC AGAGTENGAG AACAGGGTGT CGTTCATGCT GGTTCAGGT CTGGGAGGCA  
CGATGTGAGC CAAGTTGAGT GGCTTCACAG GCTGATCTGG

SEQ ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGGTCTC TTACACCCYC TCCCACCCGA GGCTCCCCAG AGATAGCAGA GAATTCGAAG AGGTGCGCGG GGACTGGAAA  
GAAGTCCNG NAGGCGCCT TCGAGTCTA CACCCAGCC TGCTTCCAG CCTACAYCCA GACCCAGCTC AGACCTTGGT  
GACCACCCCA TCCCTTTCTC CGGCTGGCTG GGTGCGGGG ATCCCTCTCT GTGCTGGCT TCCAGAGGCA GGACAGGCT  
CCTGGTAAGC CCGCAAAGTT GCTGAOCTCC TGACTTGTG TGCCTTTTAT TAATATCTGT ATTGCTGATA ACCGTGCTCT  
TGACTATGTG TCCAGGTCA TGTCCAGGT CATGGAGAAG CCGTGCCAC AGTGACCTT CCCATACTTC TGGGGGGGCT  
GCTCTCCATC TGGATGTTAG GAGGATATAG GTGTGTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GTCCCTCTG GGGACTCTT TTCCCATTT ATTGCTGCTG TGTCCTTAC CAGTTCCTTG CAGGATTCCT TCCTTTTAAA  
ATGCCCTTAA ATCTAGCTTT GCCTTGAGA CCCAGTGGG TGCTGCTCCT GCGCTTTCT TCCTGCCAAG CCTGAATCAA  
TGTTTTCATCT CCAACCTCT GCCAGTTTG CCCTCAAAG CTGCTGGCT CAAGACTGTW AGCCTGGCAG AGCCGCGNGG  
TGAAGGAGA AGCTCTTGA GCAGGCAGGA TGCCACGCT GCTTCAGCTT GCCTCTCGC CCAGCTACCC TTTGGCCCCA  
TTGGGCCCTC GIMTGCTCT CCAGGATGT ATGTTTCAAG NCTTGCTCTG TGTTCTTTG TCTG

SEQ ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGTACT ACCTCATGCT GGAAAGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA  
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG TACTACCTC AAGCTGGAAA GGGCTACTAC  
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA  
AAGGGTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC  
TACCTCAAGC TGGACAGGC TACT

SEQ ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGT GAGGGCTATG AGGGGTCAGG GGTGAGTTC CCCAGGACCC TAGTCTTGT CCCCTTCCCT GTGTCTAAAT  
AAAAGTGAAT AAATACTAAA TAAATACAAC TGGGGCCAG GCCCTCCCTG CCTTCCCCCT CCTCTCTGTG ACCCGCAGCA  
GAGGGGCGAG TTTAGATGGA GGGCTGTCTG TCAGCCCCCT CCATCCACTA ACCCATCACT GCCTCCAGG GCAGGAAACC  
AGGGCAGGC CAGCTGCGC ATTAGGCGAG AGAGGAGGG CAGGTCTCAC GCCACAGCC CCTTCCACT TGAGTCTTAG  
CATGAGGCG CAACAGAAGC TCTCTCTCC TCCAGCTAA GTCC

SEQ ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAAAT AATAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGGC AGGCCAGGC CAGTCTAGTA  
CAAAGTTAAG GAGGTAGGGA GGATGGTGGG GAGGAGGGG CGGACTACCC TGCAAGACGC GGGAGGCTGC TCAGACTGTG  
GTGATGTCAG GAAGGGCCGC AACTTTGGC ATGGACGATG CACTAAAAA AGAGAAAG

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SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TCGGCCTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA  
 CAGNACCCCG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGGGTGACA  
 TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT  
 GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCATTCCA GGGGCACACC TCTAGCCAG GCTTTGGAGG  
 GGCCCACTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CTTCATACTA GAACTGTCTG CCATCTTTAT TTCTTTGTTT TCAGGAAAAT TGGAGAGAAA AGTATTTCTT TTTTAAAAAT  
 GATTATTATA CTTTAAAGTC TGGGATACAT GTGCAGAACG TGCACGTTTG TTACATAAGT ATACACGTGC CATGGTGGTT  
 TGCTGCACCC ATCAACCCGT CATCTACATT AGGTATTCTT CCTAATGCTA TCCCTCCCT AGCCCCCAC CCTCCACAG  
 GCTCCAGTGT GTGATGTTCC CCTCCCTGTG TCCATGTGTT CTCATTGTC AACTCCCACT TATGAGTGAG GGACATGCAG  
 TGTFTGATTT TCTGTTCCTG TGTTACTTTG CTGAGAATGA TGGCTTCCAG ATTCATCCAT GTCTTGCAA AGGCATGAAC  
 TCATCCTTTT TATGGCTGCA TAG

SEQ ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCC GATCTGCATA GCCTGTGAAA GCCACGGGG ACATCAGTAA CCTTCTGCAG CCACCATCCA ATGCCATTAC  
 TGTNAAGTGA GACTTGGCCA CTGTAGCCTG GGCCTGCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGGTTTGCC  
 TCAGTTTCTG GTAAAACACA AGGTCTGGAG TGCCCTGCA AAGGGTATTG ATGGACTTCC TGCCAGTGAC AGAGCATGTC  
 TATTGCAAC AATTCTCTCA GTTACGTTCA GCACTTAAGA ACGGCTAATG NCAATAGGAT CTTTAGCAAC TTTTTCACAT  
 CATAGAAGGT GCAATCGCTC ACTTGGGAAC ACTACTGAGA GTGACTCTC TTTTAAATT GAGTAGCAGA TGAAAAATTA  
 AAATT

SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCTTTGTAA TTGTGAAATC TGTACCCAAA CCTCTGGATT AGAATCTCCA GTTGCTACT  
 GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAA  
 GAAATTTAAC CGC

SEQ ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCTGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCTGTG  
 CCAACGGGCC AAGGTGGCGA TGAGCCANTT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAACA  
 TTGTTGCAA ACGACTGAAC CGGCCGCTGA CCTCTCGGA GAAGNTGTG TATGGACACC TGGATGACCC CGCCAGCCAG  
 GAAATTGAGC GAGSCAAGTC GTACCTGCGG CTGCGGCGG ACCGTGTGGC CATGCAGGAT GCGACGGSCC AGATTGGCCA  
 TGCTCCAGTT CATCAAG

SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGNTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCCGGC AGGACGGCTC CGTGGTGACG  
 TTCAAGATCA AGAGGCACAC GCGCTGAGC AAGCTGATGA AGGCCTACTG AGAGAGGCAG GGCTTKTCAA KGAGGCAGAT  
 CAGATTCAAG TTGACGGGC AGCCAATCAG TGAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence = 26 Nucleotides)

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CCTTTTAATA ATAATTCTGC TGCTGCTGT GTACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA  
 AAAACAATAT CGCCCGGGCG CGGTGGCTCA CGCCTGTAAT TCCAGCACTT TGGGAGGCCA AGGAGGGCGG ATCACGAGGT  
 CAGGAGAGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GCGGTGGTGA  
 TGGAGGCTG TAGTCCACG TACTC

SEQ ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCTGGCCGG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTTAGTTT TACTGAGTCA  
 CCCAGAGCCC TGCTGCTGGT CCGAGGGTT TGTTCCATGG GACAGTCTCC ACAATTCTTC TGGGGAAGGG CCACAAATCC  
 CACAGTGTGT CCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAACAAATT  
 GTTAACAAGC CTCTGCAAG TTAAGGTTCC ACATGGTAGC CGTGGTACAG AGGCATTCTT CTAGGGTGGG AGAGGCTTGT  
 GCTCTACACC AGG

SEQ ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCIGACTTT CCTGTGGNIT TAGAGCCAAG CTCAAGGTAG TAGGCCGTAG GGNCTTATTT TATTTTCAAA CCCCCATCCT  
 CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGGCTTA GTGGGAACAG GTTGAGACCA GCACTT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAAGGGG NNNATGGCC ATCTTTTATC AGAAAAAGTG ACAAACCGG AATTTAAAAA ATGAATTTTC NNTCTGACTT  
 TATTNNAAA TACACTTTCT TTTTNNAAA ACCAATACAC TTCTTTGAG GATGACAGTA TTAGGAAATC CAATTNNACA  
 AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAAAGTGG CACTAATTAC ACAGTAACTA  
 TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACTTGGGC TTTCTGTGTT GAGCCCATTT  
 TCAAAAACT G

SEQ ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACTGCG CCCCCCCCCA TTTCGGTGIN ANCTCAGCTC ACTTCAACCT ACCCTCCCA AGTTCAAGTG ATTCTCTAC  
 CTCAGCCTCT TGAGTAGCTG GGATTACAGG GGTCTGCCAC CAGCTGGGT GATTTTCCCTA TTTTGTAGTG AACTGCAAT  
 TCACCAGGTT GGCCAGGCTG GTGTGAACCT CCTGACCTCA GCTGATCCAC CCGTCTCGGG GTCCCAAAGT GTTGGGATTA  
 CAGGTGTGAG CCACCACACC AGGCCCATAT TTTCTTTTAG ACATGCAGGC AATGTTGGTG GGTGTGCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTTTCTCTG CATCTATTGA GATAATCATG TGGTTTTGT ATTGGCTCT GTTATATGC TGGATTACAT TTATTGATTT  
 GCGTATATTG AACCAGCCTT GCATCCAGG GATGANGCCC ACTNGATCAT GGTGATAAG CTTTTGTATG TGCTGCTGGA  
 TTGTTTTGTC CAGTATTTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATATTGGNC TAAAGTGTG CTGTATTTCAG  
 GAAACCCATC TCACGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCCTC AATAATGAGG CGCCACTTTT TCTCCCTGTG CCTTCACCTG GTCACCCCTC TGTCGGCGAN ATCCCACTGT  
 CTCTCTGGGT GTCCAAACTT CCTCTCTTA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCCTCATTTT  
 AACTTAATCA CCTCCCTTTT GTTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAATA AGGTTTCATT  
 CTGAGGTATA CTGGAGGTTA AGACTTTAAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA  
 CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

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SEQ ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCCGGGATCG TGGCTGCACG CCACTGCAAG ACCAACATCG TCACAGCTTC CGTGGACGCC ATTAATTTTC  
 ATGACAAGAT CAGAAAAGGC TGGCTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG  
 GTGTTGGTGG ACGCCGACCC TGTGTGGAC AGCTCTCAGA AGCCTACCG GCGCCCGAGT GCCTTCTTCA CCTACGTGTC  
 GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCGCCAGNTG GTGCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG  
 GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GTGTCTCTTT TAAAGAAAC ATACTTTATT TTGGTCTAAA TTGTGAAAT ACCCAAACA TTTGATAGAA ATTGAAGTCT  
 GTCAACAGTG TTATTTATAC TAAGATCAGG ACAGTCTCTT GAGATCATAC TGTTTTATTA CTAAGTTTGG CCTTTGTTTT  
 ACAAATGTAA TGTTCATATT TATTTGAATT TTAAGATTGG TTAAATGTTA ATGAAAAGCA ATCCAATTGT TANTTTTATG  
 TAGTGCCCTT TCTCTGTATG CCTTAATTTT ATT

SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTTTATTTT CTTCATCGA AGAAAATGTT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT  
 CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCCACTTG GATGGGGCTG TTCTATCCC TGCAGCATCT GGGAAATGGAG  
 TGGATGATCT GCAACAGATG ATCCAGGCGG TGGTAGATTA TGTGTCTGG CAGATGTCCC TGCTCGAAA GACCACTGCA  
 CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGCG CATGAAAGCA GAGTCTTTG CAGATGTAGT  
 TCCAGCAGTC AGGTAAGTGG AGAGAGGCGG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNAAAG CAGTTAACT TAGCATTAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACC  
 AGTCTAATCC TGTACACTTG TGATTAAATG TGACAATCTT AAGTTGCTCA CTCTTTCCC ATTTACCAAT TCAGAGAAAG  
 CCGTTTCTT GTTTCTCCT CACCACTTTG CCTTGGCATC ACACCAACCC TGCTCGGGC TTCAGCTGCA GATCCTCCC  
 AGCCCTCCT CCCAGCTGGG CTGACTCCAG TCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGAGG GTTGTGTCTG  
 GCTTCCAGCA TCTACCAACC CTTAGAGCA ACTT

SEQ ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGG TCATTCAAGG GGGACTTCTA GCTTCTCTCT GGAACCTTT GTCCAGAGCA AAGCCAGGTT  
 TCCAAGGTCC CCACGGCAAG GCTGTTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTTCTC CCAGCTCACA GCAGTGACCT  
 CAGATCTCCA GCAGCAAGGG CCGCACTCTC GTGCCACAA GGGCCTTGCA GAAATNCTCC GGTCCCTGGG NCTCCCCGG  
 CAGGAGGGGC GGGGCTCCTG CCTGCACTGA GGCCACAGCA CTAAGCGGCT TCAGTCACAT GCTTTTCAGG TGAATCACTC  
 CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAAGTA GAAG

SEQ ID NO:111: (Length of Sequence = 455 Nucleotides)

TTTTTTTTTT TATATTTTAA ATGGAATTTA TTCTATCAAC TGCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA  
 GCAGGAGCCC CCACTGCCCA CCTGAGGGCA GGGAGAGCCT GACCCCAITG GCCCAGGCCC TGGCTCTGTA ACCATTAAAC  
 TCTTCCCCCA ACTAACACCA ATGAAAACAC CATTCACGT GACTGGGCTG TGTGTTTGCC TCTGTGACAT GGGGACCCCT  
 GACCCTAGGG GTCTCGCCTG AGCCAGACCT GAGGGACCCA CCGCGTAGG ATGGAGGAAG GTTTAGGCTT CCGTTTGTCC  
 AGCCAACGCC GGGGGGTGGG GCAGACCCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTCTTAGGC AATTGTACAC  
 ATTTTATTAC AAAACAGTC TACATTCATT CCTAAAAGGG TCATTTTCAG TAAAA



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SEQ ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGTGTA GGTCAGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC  
 TCGCCACCC ACTGCTCATC TCTGCTGTA CTGCCCAGTT CTTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG  
 GTTGGGGACC CTTGACATAG ACTAAACAAT TCACAATGTT TATATTAAAC AACTTATTC AAGTTTCCAT TTTAGACTCT  
 GGAACATCTG ACATGGTGAA TCCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACCT GACGGCCGTG GAAGACGCAC  
 TGGGCGGGCA CTGGTGACGG GTCTCGGGAC AGACTTCACA TCTCCAGACT GGCACAGTGG GCTCACACCT GCCTOCCA

SEQ ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTC A GTGCTAACA GAAGGGTCTG TTAAGGATGC TTCTGATTTA ACCAAAAGAT TAAGCTTCAG AAACAATCTA  
 ACATACTCAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA  
 AAAACTGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGTG  
 CAAATAATCA CTGCAGCAG CCTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCTT CAACAGGGAA CTGAGTAAAT  
 ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTAAAAAGGA TTGCACCTAC ATGCATGTCT GCCATGGAGG  
 TCTTTAGGC CAATGGTTCC ACTCGGAAGG GCAACCACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TGGGCCCCA ACGGAGACCT GGGGATGCCG GTGGAGGCGG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA  
 CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCCACGNCC  
 GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCCT GGAGTTCCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC  
 AGCCCTTAGG CTCCAAGAGC CCCCACCGG GACCCAACCC TGCTCCCTG GGGCTAAGCT CTGGCCTGGG GCACTCACCC  
 CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG ACCCTTGTGG GTCTTGCCCTT GCTGGGGCCA CCTTTTCTG  
 CTGGGGGCTT CCCCTTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCCTT CTGGGGGGCC AA

SEQ ID NO:115: (Length of Sequence = 293 Nucleotides)

CTNGGGGCA TGTGGCTGAT TTCCATCACC TTCTTCCAT TKGCTACGGC GACATGGTGC CCCACACCTA CTGCGGGAAG  
 GGTGTGTGCC TKCTCACTGG CATCATGAGA GCTGGCTTTA CCGCGCTCGT GGTGGCTGTG GTGCTCACA AGCTGGAGCT  
 CACCAAGGCT GAGAAGCAG TGCACACTT CATGATTGAC ACTCAGCTCA CCAAGCGGT AAAAAACGAG GCTGCTAACG  
 TTCTCAGGGA GACGTGGCT CATCTACAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCTGCT CTAGGGGATT  
 CCTCTCTCTT TTCCAAGAA ATCCCTCTC TTCTTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA  
 AACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAGA  
 GAGGCCACGT GCCTCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TGGTCCAC TTCTCCAGC  
 CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCCTGG CTTTCAGAGA GAGGGTGGG CAGGCCTCTC CTGGTACTCA  
 GCAGGGAGGA CACTGGGGCA CGGTTAGGG TCCAAGGCC ACTTAATA

SEQ ID NO:117: (Length of Sequence = 551 Nucleotides)

GAGACGGAG CTGCTCTGT CCCCAGGCT GGAGTGCAGT GCGAGATCT CAGCTCACTG CAAGCTCCGC CTCGGGGTT  
 CAGCCATTC TCTGCTCA GCCTCCGAG TAGCTGGGAG CCAGCGCGCC CAGCCTAAAA AACTTTTCAA GTCAATATTA  
 CTACGATTTA ACATTAGAGT GTGGACATGT GATTTAATCG CTATAGCTAA AATACGTCAA ATATACGTTG TCATGTGCTT  
 GAACATGATG CTAACCTGA CAGGATGAAG GAAAGTAATA TTCTTTCAGT GTAGTTCAGG AGAGCATTTG TTTTCTTTTC

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TACCAATTAA CCCATCATTG CTTTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG  
 TGGGTACTAA AGATGTTTCT GTTTTGAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA  
 AAATGGGATT CCAGGAATGG CTCTGTTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGGTTC A

SEQ ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCCCCCA AAATCAAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTGTGTCTG AAAGTCAAAG CAGCTTCATT  
 TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTACCTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC  
 GGAGGCTGAG GGCCTCAGCC TTAGCTGAGC TGTGGGTGC TGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA  
 TCTGCATGGG AAGAAAAATG CAGCGTCTT GGTAGTGGG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC  
 TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGGG CCGTAACGGA TGTCTGGAA GTTTTGACTT TGAACCAACA  
 GGTCCCATG TTAACAAGCT TCTTGA

SEQ ID NO:119: (Length of Sequence = 434 Nucleotides)

TTTTTCGGTT AAAAAGGCC AAAACTTTAT TTAGTTTTCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA  
 AACCCAAATC TTACAGTCTA GAAGCATGCC AAGACAGAGC ATTTTCTGCA GACCAAAGAG TCCCGTCAAA GTGATAAAGG  
 ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTTGT GATGAGATTA AAAACAAACC  
 AACTCCACTA TTAATAATGC TAGAAACATG GGATAGTTTA GCACCACCAT TGATTCTGGC AAATATTTCA GCACTCACAT  
 CGACTGCACT GAGTTTAAATG TCCTTTCTCC AGTTTCTCTG CTGAGAGGG AAGGAGGGAA ACCTGGGCGG AAGGGGCTCC  
 TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGTGT AGCAAATGCT ACCATGTGGA ACACCAACT TTATTGCTT TATTTATATA TTTAACAATT CTAAGTATT  
 TACTTCTTGC TTTGACAAAA AATGAAAAAT ATAGGGCAC TGAAGTCTC CTCCTTAGGA GAAAAGGGT ATATGTACAG  
 CTATGGAGAG TTACGGTCC CCTTTAACA AAGGCAATA TTAATAAAA AGGGCTTCAT CGGTCAAAA AGGGCTAAGA  
 GCTGCAAGCA TTATTTCACA CTGTACATCG GGCCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTTCTTCC TTAATCATAT CTGATGCTGG GATGTGGGTA ACCCCAAACT GAAGGCAGCT GCTAAATCTC AAATGCTAAA  
 AAAATACTGC AATTTTGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTTTG CTTACAGTT AGGATGAGCC  
 ATCTCTTAAG CTGCAGGCTC AAATGGGATT AACTGAACTC TATACCTGGG ATGGGCCATG GACTGAGCTG TCATGACAGA  
 AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA  
 GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCATCTCCT CCCACGTCAG  
 AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCCTCC CTTCCCTTTC CTGCCCGAAA GGCTGCTT TTCTGAGAC  
 ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGG CTTTTTGCTC AAAGAGCTTT GGT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA  
 CATCTTGCA TCCCCACCC AGGAAGTGG GGGAGGAGGT TATGATCCCT GGGCGCTCG GCAGAATGGA GAGCTGAGGT  
 GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TGTAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)

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ATCCAGGCTT TCATTCTAG CCAACCTCA AACACCACCA ACTACAAAGA AAATTAAAA GTCTAATTG TAACCTTCAG  
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATTTATTTG CTCTTATAC AATCTATCTT GTAAAGTACA TTCCTCTAAA  
TTTACATTAT CTAAATTAAG GGTAAAGCAT TATTAAATC ANTTAATCAT ACAATATTTT ATGGCAATAT GCACATATTT  
ATAA

SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGCGTAT CATAGGCGTG CTCACCTCC TCCCCACGCT CCGCCCCGC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT  
GAAAGGGGGG AAGCCCGAGG GGCCCGCTGG GAAGGGTCTT GCGCGTAAA GGGCATCCCA CTGGCACTGT GCCTCANCTG  
CCGCTTTCTG CTTCAGCTCA GCCAGTGGC GCGCTGCTC TTCAATCACT TGTGTCCCT TCTGCTGCAG AGCTAGTTGG  
CGCTTTGGTC TCGATGCTCT GCAGTGTGGC TGCCAGGTGG CAAGGAAGGC TGCCCGGTGC CATTTCTGGG GTGAGTAGGA  
GCGCTCTTTT

SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCTCTCTCC TTCCGTTCTC CATTAACGA GCCACAGTAT TTCTTAAAGC TCGTTGGCAG CCTGCACCTT GCTTATCTCT  
GGGAGACAG AGTTTGCATC CTATTACAAC CCATAGTTTT TGCATAACCA TGGTGAAGG AACCATCTTT CCCAATCCCA  
ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CTTAACCTT TCAGAAATCAC TCATAAGTAA ATCTATAGC AGTCTCTGCT  
AATGCAATT TCAATGTGTG CCGCTTATT AGGTGACTTT T

SEQ ID NO:126: (Length of Sequence = 266 Nucleotides)

CTTTAATGA TGTGGTCTG GTGGGATTTA TAAAGGGAGA TGGACCCCTG GNAAGATGCT TTCTMAACC ACAACCCACA  
CATGGGTCA CCATTTCTC TTCTCTCTC TTCTGTGGT GCGCGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT  
GTAAGGCCCC TTTCAGTCC TCAGAGTCCA TTCTCTCTT GTGCTGAGG CCTGCAGTGG GGACCATATA CTCTGGTGC  
TCTTAGTTG CTGTGGCTG TGTCTT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GTCTGGTCT ATTCAATTTG TAGTTGCGAG AAAAGGAATG AACCGTACT ATGGCAATTC ACCGTGACGT GTGATAATTT  
AGTTTGTCT GAGTTTTCAC TCTAGGTAA AACCTAGTTA TCCTAATTAA TAATTAGTTA TGGATGATAT AGTAATTTTT  
TTTTTTTTT ACTGCTCTC ACTGTCTTC GGGCTGGAGT AAGTGGCTG ATCAGATTC GGTGCAGCCT CGACCTCCCT  
GGGCTCAGT ATTCTCTGC CTCAGCTTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT  
GGTGTGTTT TTTATAAAGC CAAGGGTTT GCCATGTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC  
AGGCAAGTCC TCCACCTTC GGGCTTCCC AAGT

SEQ ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CTTGAGAACC GCCATGTACT CGGAGATCCA GAGGAGCGG GCAGACATTG GGGGCTGAT  
GGCCCGGCA GAATACAGAG AGTGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCGGTGAAG GCCTCTCGGA  
GTCACAGGA GCTCCACCG GAGCTGCTCA TGAACACAG AAGGGGCTT GGTGTGGACA GCAAGCCAGA GCTGCAGCGT  
GTCTAGAGC ACCGCGGCG GAACAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGCC AAAGCGGCTG CAGTGGCCCT  
TTGAGCAGGA GCTGCTGAGA CGGCAGCAGA GGCTGAACCA GCTGGAAGAA CCACAGAGA AGGAAGAGGT TCACGCCCCC  
GAGTTAATTA AGTCAAGGA AACCTTCGGA GATTCCACA CTGACAGCG AGAGAGAGAG CTTTAGGGCC A

SEQ ID NO:129: (Length of Sequence = 186 Nucleotides)

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GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAATCACC AGTGGAACTT TTTCAAAAAA TACACCATTG GCTCTATGTA  
GTCTACTGA TCIRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG  
GAAGGAGGAT CATTTRAGCC CAGGAG

SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAACTAT GAAACACTGC TGAAAGAAAT  
CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT  
CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATMTT TCTTTACAGG NTTCGGAAAA GGAATTCTAA AATTCATATG  
GGACCCAAGA CGGGGGCCGC ATAGCCCATG GCCGGCTTAG SA WAAGGGA CAAATCTGGG AGGCCTT

SEQ ID NO:131: (Length of Sequence = 184 Nucleotides)

CCAGGTTGGA TGGAGTGCAA TGGACGATC TCGGCTCACT TACCTCCC AGGTTCAAGC AATTATCCTG TCTCAGCCTC  
CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCCAG CCAATTTTTG TATTTTTAGT AGAGACGGGG TTTCACCGTG  
TTAGCCAGGA TGGTCTCAAT CTCC

SEQ ID NO:132: (Length of Sequence = 270 Nucleotides)

GCNGGAGGGC GTCGAGGGCC AGGAGCTATT CTACACGCCC GAAATGGCTG ACCCCAAGTC AGAACTMTTC GMENAGACAG  
CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCCGGAA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGGCG  
GACCTGGGGC CCGCAAATC CTTCGNNNC ATTGTGGATG TCCACTTTAA CCCCACCACA GCCTTCAGGG CACCCGAGCT  
GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

SEQ ID NO:133: (Length of Sequence = 529 Nucleotides)

CTTCAGTAC ATAGCATGTG TATTACTGAT AGCTTTATAA ATCTGCCAAA TAACATAGAA TGTAGCCTCA AAAGGATGGT  
CGAGGGTTGG CAATCTTTCT TTCTCCACC AGTGGTGTGG AGCAACTCTG TGCCTTAAAG AGGGCACCAT GGAAAGAAAC  
AAAAAGGAAT CTCTTTCAA ATGCTGGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAACTGCA TCTAATTAG  
TCCACTCCAC ATTTCITGG ACTCTAAGTA TTCTGCACCT GAAGGCTAAA TTGAAGTGGC TCAGCCCTAT CTTTTTGGC  
ACATCTTTAA TTACAAATCT ATTCTTCTT CCTTCATTT ACTTCTCTC TCTTAAGTAA GAAATGTGGG AAATGAGACT  
GGCAGTTTGG TTGTGTTGCA TGTGGGTGTC CATTAGGCGT CTCATCCTAT GGCCCTTTT GGAAATGTG CCTTCTACT  
ACACACCTGG GAGGTTTCCC CAAGGCTCAA CCTTTTGTCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGTTGGCG ACCGCTGCAC CGGGGATGTG TCCTGCCACC AGAGGAGGTG TCGTGGCGG GGAGCAGAGG GGCTTTGTTT  
CCCAGGTGAA GGTGCGGCTT CTTCACTCTT AGAGGTGCGT GTGTGGGTGG GGGTGCTTGC TGTGAGGTT TATGCTGTA  
ACTGACAGCT GTCCCCAAG CCATGCTGGC AGTGTGTAGG TGTGCTGCG GCCACCGCAG AGGAATCCTC TGGGCTTCTG  
TGGTTCAAGT GGGGCCAGC GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCTTCAGCA TCTCCTGGGT TTTGGCAGCA  
GGAGGCGTCC CCTTGTGCAA TTCAGGGGC GTGGGGGCT GGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC  
CCTTGTGTTG TCCCCTTTCT TGCAAGAGGG GTAGACG

SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCATGTGTT TGGTGGGTGT GTCACGCTCC CAGAAGACTG AATTTATGTT AGGATCACTC GCAAGGCCTT GTGAAGGAGT  
CTTACCTAAA ACAAAGAAA TATCAGGGAC TTTTGTGAC TATTTACAAC TCAGTTTTAC ATTAAATTC AGGCAGTGT  
AATATGCCAA GGTAGGGAAT GTGCCTTTT CAGAGTTGGC CAGGAGCTCC TGGCTGGGAC ACGGAGAGGC AGGTGTGGCG

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TAAGGCTCA CTCCGGCTG TGAAGGCTC TGATCACACA GAAGCAGCC TGCCAGCCT GGGTCATTG CTGTCCGCTT  
 TTCTCTGTGA CCACAAGCAG CCCTGAACAA CCAGTATGTG TCTTCTTTCT CCAGATAGTG AAAAAGGGTG TCCAGATAAA  
 CCCACCTAAG TGAATGGGC CATCTCTAA ACTGGGGTAC CTCAGTGCAC AGGTCTAGG TAGGCTTTCC ACTTAATCTA  
 ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCCITGATT GTGG

SEQ ID NO:136: (Length of Sequence = 279 Nucleotides)

CAGTTTGGAC AAAGTAGCAT AGTGACTTIN TTCTACANT GACTTTCGGA GAAGTINGCA GTTTCIGGCA AAGTGACGCT  
 GGGCTGTGTTG AAAAAGGCCA GCTTAGCCTA GGCTGCCATC TTAACAATT TCGAGGCTGT AGCTTCCTCA GGATCCTTTG  
 CCTGTGGTCT GGTGGCCGGC AGTGGCCCGT CTAACAGCTT TTAAGTCTGC ACTTAGTGCC TGAGCACCTA TGGCTGTGAG  
 AGATGCTAGA TACAGAACCC TGTCCTGTAC CACGTGGGG

SEQ ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAAATTTTA ATGGAGATCT TCCTGTGTGG TCTGTATAT GTCTATCCGT TTCTGGGTGG TTTAGGAGAA TCTGTACTAT  
 TTCAGCATGT CCTCTCCAG CAGCAAAATG AAGAGGAGAA CTAAGTTGTC CATTTAAAAG GTTTGGATTG CACTTTCCIT  
 TCTCTAACAA TATGCGAGTG GCCTCAACTT TTCCATACCA GCATGCATAA TGAATGGGTG CCCAGTGGTC ACTATCTAAC  
 TGGTTGACTG AAAATCTTTC ACTGAGAAGA CGGCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA  
 ATCATCTACC CACTGTGTTT CCTGTCTTC TGTGACACTG CTCATGCTTC TCTGCCAGTT TTTCTGTGTT AGGGTATTG  
 GATTTTGTAG TAGTCTGGAG CTCTAGACC CAAGTATGGA TTTATTACC ACTTATCTAC CCGATTGTGA TACTGAGGAT  
 CCTATCCAAC AAAGGGTGTG AATCCAGGAT CCGCCTTC

SEQ ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANCCACT GCGCCAGTC GAGTGGTAAT ATGTMAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
 GAGGTAAAA TACTGAGTAG ACCATMCTGT AAACAGATGT MCTGTATYC GGGCTTTCAT ATTCCATTTA TAAAGCACAG  
 GCAGAGCTCA GAGTAGATT AAYGTAACT TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT  
 AAATYCAAT CTGCATTGGG CTGTGA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTCGCTCA CCGCTCTGAC CACCGACAGG CAGAGCAAAG GATGCGGGAG TTGCTCTGTC TGCCCATCTA AGGGGACGTA  
 GGCAGAGAAG CAAAGGCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCGCAACGG AACAGGAGTC CTTCAACTAT  
 TGCTGCCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG  
 GAAGGTTGGA AGGGGTAGGG TCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGSCA  
 GAGTAGAAGC CCTGGGCCCTT G

SEQ ID NO:140: (Length of Sequence = 234 Nucleotides)

GTGAAGGGAG TTGCAGAATC AAATGTCTAC ATAGGCCAAA CAAAAAGAA GGCTTTTTC AAAAAATTAA AATTACATG  
 CAGTCTCAGA GACTATTTAG GCAAAGTTCA AGTTAGGAGC TTTTAGGATG TGGGANTAAA ACTTTAATKG GAGGGGAGGG  
 CTTGCTTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTTAAC TCCTAGCCCA GCCTAGCGTG CCT

SEQ ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAACTT TCTTCATTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG  
 AGAACTTAG GTGAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTCTCTACT  
 CATGTGCTTA ACTGGTGAAG TGATTCTGTA GAAATAGATC CTTCTGATTG TGCACTCAT TTCTTTATGG CAACTACAAC

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AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC  
TCACTCACTC TGGGCTGCG CACTGGGTT GTGG

SEQ ID NO:142: (Length of Sequence = 373 Nucleotides)

GTTTTTGCAA CACTTTTTTT TTAAGTTATT GGGTGCAAAA TCCCAAACCA GGATATGTGT ATGTCTGTGT GTTTATGTTT  
TTNATTGAC CCTCCCTCT TTCAACCTAC CCCCTTTTAT ATCTAATGTA GAAAAAGCGA AATTGAATCT GGAAAGCAAA  
CTGTTGTATA TAGTTGCGGT AACATCATG AAGAGAGAGC CGGGCTGTCC AGTTGTTTTT GAGACAGAGT CTCACTCTGT  
TGCCAGGCT GGAGTGCACT AGCATGATCT TGGCTCACTG CAACCTCCCC CTCCTGGGT TTAGGCGATT CTCCTGCCTC  
AGCCCTCCCA AAGTAGCTGG GATTACAGAC CCGTACCACC ACAACTGGGC TAA

SEQ ID NO:143: (Length of Sequence = 262 Nucleotides)

COGCACCTCG GCCAGAGGCG GCTGCAGCAG CTGCTMCCTT TTCCCTGCCG CCGCCTCTCC AGTCCCTTTT TTAATTACCA  
CTCCAMCTGC TGGGAACGGG CGAGAAGAG GAGGAGCGA GAAACTCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA  
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT  
TGTTACACAG GTGACTACAC TT

SEQ ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAGCGG GACCCAAACA GTGGTCTGG GGAAATTTTT CCCTGTCCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACGTG ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGNTGGGC  
TCAAGTGACC ATGCAAGTCC GTTCACTCC TTCTTAAGAC CCCATCCTTC TCCCAAGTCC TCACAAGAG CTACCTTCTT  
CAAAACAATA ACAGAAACAC ATCAAGCTTG GCGTCACTG AATTCAGTT CTGATTTCCT CCGTCACCCC AGCAACAGTG  
CCCAGTTGA TTGTGACACT TTGACCCAGC ACTTGGTTTT GAATGTTCTT TCGGCTGT ACCG

SEQ ID NO:145: (Length of Sequence = 324 Nucleotides)

CTACATGGAA TCATAAGTKT TCCTAAAAA GGAAGACAGA TTGAAGACA GAGGAGGAAG GTGATGTGAT GATGGAAACA  
AGGGGAGAAA ACGCAATGTG ATGTGGCCAC GAACCAAGTA ATGAGGACAG CCTACAGAAG CTGGTCAAG CAAGGAAACA  
GATTCTCCTC TAAAGTCCCT GGAGAGGGCC TGGCCATGCT GACACCTTGA TTTTKTCCA GCAGAACTC ATTTTGGATT  
TCTGGCTCC CAGAAAAGTA AGGGGTAAT GTGCTGTTTT ATGTCAGGTT TKGGGTAATT TGTATTATGC AGCCATCGGG  
AAGG

SEQ ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCTCTCT TCCTTCTTCA TOCAAGCAAG GGTGTGGTGA CAATGACCTG ATCGGGGTTT AACGCCGGCT CTGCTGCTC  
ACCAGACCTG GGGTGCTGAG CTCTGACCAG CCTGGGCAGC CCAACCCACA GGAAGTGGG TTTCATAGCT GGGTCTTCAG  
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCCCGCTCC CACCACCCA AGCCAGAGAA TGGGGCAAAC TTGTATGCAT  
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTGA GAGTTATTGC TTCTATGACA  
GGTGTTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

SEQ ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTTTTCTG AGTTCCCGTG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCCTGGTCAC TCGGCCACTC TCTCTGTTT  
CTGGCCTCTT CTCCTTCAC TCCGTCAG TCTGTTTTTG AGAGCAGGGG CTGTTCTACA GCACCTCAGG GAAGGGAGGA  
GAGATACCTG CTGCTTCCAT TGCTTTTCCC TTCTGGAGT CGATGCCCTT CTAAGGGTGG GAGCTGCTCC TTGCAAGGGC

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GGGTCAGTTT CCCAGGCCAT GCCGGGGGTG GCCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT  
GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCGCCC AACCCCCATC GTCACCTCTGC  
TGCAACACGA CACAAAGGTT TAAAGATCTG GSCCCAAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC  
CCCCCCCCC ACCAGGCCCTG TTTGTCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA  
GGAAGATCTT TGATATCAAT GGCCTAAGCT CTGCTCAT

SEQ ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTTT GTTTTCAACA AACTTTACTA AATAACCCCTG GAAAGGCAAT GAACGATCTG ACAATTTAAG CTCTAATGAT  
TTAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACGGAG GGTGAAGGAG GCAGATTTCT GGAAATGCAA  
TGATCCACA CATTTGCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTGTCTAAGT AACAACTGTT TATTGTAAAT  
CAATACATTT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACTG  
GACCAGCAAG GAAAATAACA TCCCCATCCT CAAAAGAATT TTAAGGTG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTAAAG TGATTGCGG ATTGCGCTAA ATTATACAGA  
AGAGTCAGCA CCAGTGCCCA GGCCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTT ACCACACTCC  
TGCTCTGCTG TTGTCTCAG CTAAGAAAGC CTACCCCTGA GTTACCCCTT TCCATCTTAG AGCCTTCCTG CTCGCTGTCT  
GCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTCACCCA GCCCAGCCTC TGCCCGTTTT CCTTCTCCTT TCCACTGCGG  
CTGAGCTCTT TTCTCCTTCC GAGAAGCCTT TCCTTCATCT TTCCTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGGC CGCCTCCCTC CTCTCTCCTC CATAGGTGGG GGTGTGGGC CTTCTTTTTT TTTTGTCTT GGAGGGCAGT  
TAACTTCTC CATTTGCCCTC TCTCTTCACA CCCAATGCC AAAGGACACT TTTCCTTTCT TTTGTGGGTA GTTGCAAAA  
AAAAAAATTC CTATGGGTTA CTGCCACTTT TAAATACTTT GTAACTTAAA GGCAAAGTAG TATGTCACCTG TTTCTTTTCC  
CTGTAGTTTA CTTTGTAGGT TAAACATCTT TCCATGTCTT TATTGGTCAA ATACAGTTCC TYCTTTTGTG CAATGTAAAT  
CCTAATATGG ACCATTTTTC CTAATGGGAT TACCGATTTT TTAAAA

SEQ ID NO:152: (Length of Sequence = 269 Nucleotides)

GTTATTCTGG CAAGTGCTTT CAGGGCCCTC CAGGGTTTGG CTGGTCACCA TGGAGGGGGG GTTCAGGTGC TGAATTTAGG  
GACCCAGCA TCTCAGAGT TTCCCTTCC ATCTTTCCCA GTGGCACTGT GTCTGAGCAG GTGTGCCAG GTGAGGTGT  
ATCCACTGTG TCTGAGCAGG TGTGCCCAGG TGAGGTGTGA TCCACTGTGT GTGAGCAGGT GTGGCTGTG CAGGTGGAAG  
TGGGGATATN TGGGCACCTG GGTGCCATT

SEQ ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATTGTAA TGGGGTCCGC GCAAAGGAA GGGGTGGAGG GTGGGTACA TGCAGGGGAC  
ACAGGAACAN GATCCACATG GCCAGGNC AACTTCTTTC TGTCTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA  
NGAGCTGGGG TGGAAGAGGG GAGGGGNAAC ACTGGCTGCA TTCCCNAAAC CCCANGANGC ACCTATAGGC CCTGGACCCA  
TGGGTACCC TGGGCCCTAG

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SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TGGAACCTTGT GAGTGGGGAC CCATGATGTA TGGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCCTGAGGTC  
 AGCTCCCAGG TCGGTCTGTC TGGGCCAGGC CTGGTTTTC AAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG  
 GGCTCGGCGG GGAAGAAGCC AGCAAAGTCC CCGGTGTCCC TTGCTGAGTA TTCTGTCACA GACAAGCCTC CATTAAAGCC  
 ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCGGC CACCACTGCT GGCTTCAGCC CCTTNAGCAG CCCATGGNTT  
 AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCTGTNTC TATCCATGCT GTTAAACTCC CTGCCTCCAA CTGGGGGTCA  
 CCACT

SEQ ID NO:155: (Length of Sequence = 40 Nucleotides)

CCATGATCTT ATTTATTACA TCTAGTTTTT CTTTATACCT CTAAAAAAA GTGCCTTTTA GATTACAGC TTGTGCTTCT  
 AAAGCAAAGG TTAAACATC ATGCCCAA GGAAACAAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANTGTAT  
 GTTACAAGGT TCTAAAATCT CTTCAGCACT GGTGGTTGG TAGATTGTAC GACACTGACA TGGTCTTGG GAGGGTCATT  
 TATCTGATGG TTGGAGCAGC ACCATGGGAA AGCTGCCAG ATGGTCTACT GAAGTCTTG GCTGTGCACA GAATGGGCC  
 AAGGGCCAGN AATTCATGAG TCCGGGAAC TTGGNGGTC CTTACTCAAT CTCCTTAGTG CTAAAGNTTC AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCTCTGGA TTGCTTCGTT GGTGCGAAC TTAAAGATG GCAAAGTGTG ATTGGNTCCG ATTAAGACAA GCTTTGTAGT  
 TTTCTTCGTG TAAACACCAA ATCCCGCTG GGCCATGAGG TAGCAGAAGT GGGCCGCATC CAAGAGGCC CTTGAAGCCA  
 GAGTGTGCGC CATGGTAGCC ATGCTCTGG ACTCGACGTC CATGTTGTG TTCAAGTTGG ACAAGACCAT GCGAGGTGC  
 GGCTTCAAT CTCCCATTT CTGCTCTCA CAGCACTGG ACGCGCAGG CATCCGTCCG GACATGAGCT GGTAGACTGT  
 CTTCAGAGG TCGTTGATK GGGAGGCTT TTAGCAAAC TKGTCATGA CTCGGCGTG TGTCGGCTG TTCCATCTTA  
 CTGCAAGTA GCAGAGCGTG ACCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAGG GTTTAAACG GAGTCGAAC CTGAGTAGAT TTCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATTC  
 TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG  
 GGATATAACC TGAACCTTTT TTTGGAGTGG GGTGGGTAGA CTACAGTAGA CACAAGGGCT GGACATGCAG ATGCTTAGGG  
 GATTAGCGTT TTTTATAAT TGTCTGTTT GTCACTCAT TCCGTGTGT TCTTACCTCT ACAAGGTAC ATTACACATT  
 TTARGTTTTT TAGTGACCTT TAACCATGTT ACTGAAGCA TTTTGAATA TAAAGCTATT TTA

SEQ ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTGG CTCAGCTGCA GCGGCASGA AGTGGTSTC CAGGGGAGTG GACAAGCAAT TCTCCTGTCA TTTGCAACTT  
 TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCTGTAGA GGGATTTCAT CTGTACCATC ACACATGGAA  
 GAGGAGTTTC TAGGTACAGG AAGGCAGCTN CTAAGCTAAA GGTTCCTTGG TCCCTTNGTC CTGGCATGCC TTAAGGAGGG  
 G

SEQ ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCACTAA TGGCTCACTA AAGGGCCAGC AGTTTAAAT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG  
 GTGGATCACG CCTATAATCC CAACACTTTG GGAGGCGAG GCGGGCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT  
 GGCCAATATG GTGAAACCTA AGCCTCTACT AAAATTACAG AAATTAGCCG GTCGTGGTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)



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GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCGTG CTGTACTAAA  
 GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCCTGA GTCCAGCTA CTGGGAACT CGGGAGGCTG AGGCAGGAGA  
 ATGACCTGAA CCGGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC  
 TGTCTCCAAA AAAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTTGTMTTG ATCTTTCCCT  
 TATCCTGT TT TATTGCCATT TACCACGTCC TTTTGGAAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGGCGC CGGGCGAGGA GGCGGCAGGG GCGAGGAGGG GCGGGCGGGT GGCGACCCGC AGGAGGCCAA GCCCCAGGAG  
 GCGCTGTG CGCCAGAGAA GCGCCCGCC AGCGACGAGA CCAAGGCGC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA  
 GGCGAGGAG GCGTGGCCA GCTCCGCGCT GCTAGGCCCC CTTCGCGCGG GCGCGCGCG CCGCGGAGC AAGGAGGCAG  
 CCGCGCGGA GGAGCCCGCG GCGCGCGCAG ACT

SEQ ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTTGGTCAA ATAAATCAGA GTACTACAAT CATCAAACAT CTGATTCATT TAACATGTGA GCATCTATAC CTGCCCATT  
 GTGTGAATAT TCAGTATATA TCTCATACCT ATTCTCATGC CTTCATTAT TGTGGTTATG GCTGTAGATA TGGAAAAAAC  
 AGTAGCTGAG ACATTTTTAT TATGAACAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT  
 GATTGTAAAT GCATGATTTC AACATGCTAC CCGCCCAACA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TGCCCCAGGA AGACAGAACA TGGAGAACCG TCAAGGCAGG AACCCACAG ACTGTCCCTT CCAGCCCACA CTCTGCCACC  
 TCCTGGCCCT GTCCCAATTC TGAGCCAAGG CCTCCCGAG GCAGAAGTTG CCTGGTCTC TGTCCCCACA GTGACCTGAC  
 TGGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAACTTC GTGGTGACTG CCTTTGGGAG  
 CCGCAAGTG GCCAGAGGCA GGGGTAGCTG AGTTCCCTGG AGACCCCTTT TTTTCCCCA RGTCCCCAG AGGGCAACGC  
 CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCGGG CCGCGCTCC CTAAACAGA TCTACGACC TTAACGACG CCATGCTGAG GCTCATTCOA TCCCTGCRGA  
 CGTATGCAGA GCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA  
 CTATATCTAT TCACCCCGTG AAATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCTG  
 TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT  
 TGGGACTGAA TGAGAAGATC GACACGGTTG CTCTTGAAGG CACTTTCCCT AACCTTCGGC AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GTTATAATTA TCTTGTTT TAATTTATG TTTATCTCTT ACTGTGTATA ATGTAGAAAT TAACTTTAC CATAGGTATA  
 TACATATTGG AAAAAGCATC TTATATACAG GGTGTGTAC TATCTGTGGT TTCAGGCATC CACTGGGGT CTGTGAACAT  
 ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG  
 GGATGGGGTC AGGGAATCTG AATTTTAAAA GTTCCCATG TGATTGTATG CCCAGCCAAG GCGTGGGGAC CACTGTCTTG  
 AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCCT GGTAATTCCG AGTGCAAATT CTCAGGCTGG AACCTTATGG  
 GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

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GAAAACTTTG CCATGGGTCA GTTTTATTGG AAGTTCATTT TCCTGAATGT TTGGAAGAAA GTCTAGTGAC TCAGGATAGC  
 ATTTCTAATT TCACAGAGTT ATTTTCCGT TATGAAACAC AGATTGCCCT TGAGGTCTCC TGTTCCTACT ACTGCCCCCTC  
 ACTTTTATGT GGGCCTCCTC TTTCCTTTGT TTCTGGAGAA CCTTTTCCTG TTCAATTCTG TTTTAATTTT CAGCAGTTTT  
 TTTTCTGTGT GAGTGAGGCT GTTTCCTAGC AGGGAGGTCT GGTGTGGTCAT TTTCAAGTTC ATCAGGGCTT CATCAGGGCT  
 TGTCCACTTC AACCCCTACG CTATAGGNCC CTNTGCACCA TCTGCANICT TCAAAATGTG CCCACTGGTT CGTTCCCATG  
 GANGGCTTGT TGGTAATTTG GGCTTTTAGG GGGGGCCATG GAAGGAGCAA ATC

SEQ ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AAACGTGTAC AACAGAATCA TGGACTGACA CAGGTAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA  
 AATGTCCAC CCCAAACAGC TCGGAGTAC ACATCACACA GGGCCTCTGG TCCCGGCCCTT CTCAGGTGCT CTGGAGTGGA  
 GGATCCTTTG AGGGAACCTCT GACCACTCCT GTTGTCTACC TAGAGAGCAC GCCACTTGGG CCACCTACCC CCAACCTTTG  
 GCCAAAGGAG TGAAAGGACC TGAACCTGT CGTCAACCTC AGCAT

SEQ ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCTGTATAC CGTCAGCTC CTGGAGCCAT TCATTCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG  
 GGACGGTGA AAGGNTCCAA AGACGAAGCT GTNGTTTATC CTGTGTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG  
 GTTTAATAAG CTTTTCCTAA AACATTTTCC CCTTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT  
 TACCAGCTGC GNTAAGTCA ACTAAACCCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG  
 TTITCAG

SEQ ID NO:169: (Length of Sequence = 346 Nucleotides)

GGTGCTATGG AGAGCCGGCC GTCTCCAGG GGTGAGCTGG GGAGGCTTCT GCGGTTCTGG AGTCCCGGCG ATGGCGCCAG  
 TTCCCCAGCA AACCCCTCC AGAGCTGCC COGGATGCAC AGACAAGGAG GGGGCTTGGG AGTGACTTGA GGCTGTGACG  
 GGRTCGCCCT CGGTGTGGG AAGTGAGTCT TCTGTGGCA AGAGGTCAGA GTCGTCCCTG AGGCTGAGTC GAACACAGAC  
 CCGTGGCCCT CATAAATTA AACATAAAG CACAAAATG GCGCAACCA GACAGCATTG GCTTTCAGAC AGGCAGGGAC  
 ACGGGGGCCC CTTGTGTG ACCTGT

SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TTGACCTCAA CTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTG TTGCACTCTT TTTGTGAGCC AGGCCCTGTA  
 GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCCAA TCCTCCCTT GGGGGCTGGA GGTCTCTAG TTAATGGCA  
 TTCCGGTGCT TAAGGCACT TTTGGGTAGA GGTITGGCAA GGATGGAGT TCCAGACCTA TGATCCTCTA AGAATTTAC  
 CTTTAAAAA CAGCCACCCA AATGGTGTG GCGTGGGAG CAGGTGGTGG TGAAGGGACT GGGGGTGTCT GGCCATKGCC  
 ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCTGCCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEQ ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGCACTG GCGCAATCTC GGTTCCTGTC AACCTCTGCC TTCCAGGTTT  
 AAGTGATTCT CTTGCCTCAG CCTCCCAAT AGCTGGGATT ACAGGCATGT GCCACCATA CCAGCTAATT TTGTATTIT  
 CAGCAGAGAC GGGGTTTCAC CATGTTGGCC AGACTGGTCT CGAATTTCTG ACCTCAAATG ATCTGCCCAT CTAGGCCTCC  
 AAAAGTGCTG GAATTATAGG TGTGAGCCAC TCGCCTGGC CTTTGGGTAA ACATTCAAA TGCAMCCAAC CATTAAAGGT  
 A

SEQ ID NO:172: (Length of Sequence = 293 Nucleotides)

139

GAAACTTATA GTCTTGCCCTC CCAACCTTCT GAACACTCCA GTAGAAAAAT CTCTCGCCT ACCTTTATCA CCCCACGACC  
TACTAGCATT TCTTACTCTC AAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTTATTAT  
GACARAACCTT TAAATTTTA TCCCCCTCTC TGAGAGKICT GCTAGGACTC CTTCAGATAA GTGAAAAAGA AAKTTTTTAA  
AATTTATTCT CAAATCGAA TCOCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEQ ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GTTCCTCAGG AAAAGGATGG ACCTTCTCTT CTCTCAGAT GGTCCTTCC ATTCCCCTGA AACCTGCATG  
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CCTCCCAGCT CACCTCCATC TATGCATCTC  
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCTCCA GCAAGCCCTG  
CTAGCCACAT GAGGAACAAG TTCCGCTGTC TTCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCCCTCTGC  
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG  
TGAAATGGCA GCGGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTGTAGGGC TCCAGGAGGA GGGCCGAGAA  
GGTGTTGACC TTGTCTGCCC CCCGCACCTC ATGGGGTAAC AGCGGCAMTT TCACGATGTG GAAGTTCTTC ATACAGGTCC  
TCCAATCTGG TCCAGATACT TGGCCTGGGT TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCCATGCC TTGTGTACAT AATCTCTAAT ATTTATATAT ATIGATATAG AATTCTCTCT ATAATATATG TCATAGAATC  
TCTCTTGGGC CTGGCGTGGG AATGTGACAT TAAGAAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG  
GAGGATGGTG TTGGGGATGT ATAGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCCCT TTCAACACAA  
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTTCA TTTAATAAAG  
TCAATTGAAA AATGAAAGTG CACCCCCCT CCAAAAAACA GGAGATTCAT TTAGCAAGAG CCGTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGOGACGG ATCGATAAGC TTGATATCGA ATTCCTTGAT NTTTTCTAGT GTTATGGTTT  
TCTCCCACTC CAATACTWT TCATACCTKT GGCTKAGIT TTCCATCTA TAAATCATG TGCTAAATAA TTAATATCA  
TCTCTATCAT TGTCAGACTA CACAAAGCTT CCAGCCTGG CAACAGGAAC CCTGTCTCTA AAAAAATAC AAACATTAGC  
CAGGTGTGGT GGTATGCGCC TGTATTCCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTGGGCTTT AGAGGTCAAG  
GCTGCAAGTG AGCTGTGATT GCGCCACTGC ACTCCAGCT GGGCAACAGG GCAAGACCT G

SEQ ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTTTATTC AAACACAGGC AAGAACAATG ACCTTCAGAG CTGGGTAAAA ATAATAAGTT AAAAGCATGG TTAGAATTTT  
AGACAATCAG ATAAAAAGTT TGAAGGAAGT GATTTCCCT TCCTCTCTA ATTGATTAAT TCAACACAGC ATAAAAATAA  
TTTGTATCTA TAAATATCC TTGTTCCAC ACAATGAAC TGGAGGTGGC CTTAGGATTT CTTGACTAT GCACAATGCA  
CACAATCTAC ATGTCCCTCC TCCCCAATT TTAAGGCAAA AATGGTCTG CATCTTCAGG CAGAGGGTGG GCTCATGCCA  
GCAGTCAGCT GTGGTCAAGG AACTGGGGG TGCGTTTCT CCACCGAAAG ATGCCTGCTT TGGGTCCACT TTGGGCGCGG  
GATCCCATTT TATTTTCTAG CTTGTGCTC ACCACAGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

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TGGGGGACCA GCAITGCTCC CAGCTGAGGG CGCCGTCTTC CTCACCACGT ACCGGGTCAT CTTACGGGG ATGCCCCACGG  
 ACCCCCTGGT TGGGGAGCAG GTGGTGGTCC GTCCTTCCC GGTGGCTGCG CTGACCAAGG AGAAGCGCAT CAMCKTCCAG  
 ACCCCTGTGG ACCAGCTCTT GCAGGACGGG CTCCAGCTGC GCTCCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA  
 GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGNTAC CCGCCGGACA ATCATGGCCA  
 ACTTT

SEQ ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCCC CCGGAGTCCC CAAGATCCTG GTGGGGAACC GCCTGCACCT GCGGTTCAAG CGGCAGGTGC CCACGGAGCA  
 GGCCAGGGC TACGCCGAGC GCCTGNGGT GACCTTTTTT TAGGTCAGCC CTCTTTGCAA TTTCAACATC ACAGAGTGGT  
 TCACGGAGCT GGCCAGGTTC GTNCTGCTGC GGCATGGGAT GGACCGGCTC TTG

SEQ ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCTTTATCA CATTATACAC AAACATAGAA AACAGTGTTC CAGAAGAGAA GCAAAGGCCA TTGGCTTCAA ATATTTATGC  
 AACAAATGAA ATGTTCTCAG CCCTTAAATG AGCACTGTG ACTTGTCCAA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC  
 AACACTAGAG CATGTATCTC AGTCTGTCT CATATTGCTA TAAAGGGCTS CCTCAGACT

SEQ ID NO:182: (Length of Sequence = 451 Nucleotides)

GTCTTACTCT GTTACCCAGG CTGGAATGCA GTGGTGTGAT CATAGCTCAT TGCAACCTCT GCCCTCTAGG CTCAAGTGAT  
 CCTCCACCT CAGCCTCCCG AGTAGCTGGG ACTACACGTA CATGCCACCA TGCCAGCTA ATTTTGTAT TTTTGGTAGA  
 GACGGGGTTT TGCCATGTTG ACTAGGCTGG TCTTGAATC GTGAGCTCAA GTGATCTGCC TGCCCTGGCC TCCCAAAGTG  
 CTGGGATTAC AAGCGTGAGT CATGGTGCTT GGCCTAGTTT GCTCTTATTT TTTTCCATC TTTGCAGTTT CTAGGCCACT  
 GGGAACAGGC TGCAGAGCTC AGAGTCCACA GCTGTGAGGC TCCATGTTGC ACCATCAAAA AATAAGGTGA CGAGAGTCTT  
 GGGTTTCCCA GTGTACGGC AAGAGGGGT ACTGCTCAGC GGTACACACA G

SEQ ID NO:183: (Length of Sequence = 444 Nucleotides)

CCAAGTTGAC CCGCCGAACC ACCGAC-GGA AGAGTGAGTT CCTGAAAACCT CTGAAGGATG ACCGGAATGG AGACTTCTCA  
 GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAAG GAAAATGGGG AGGAAGGCTG  
 TCATCAAAAT GGTCTTGCCC TCCCTGTAGT GGAAGAAGGG GAGGTCTCT CACACTCTCT AGAAGCAGAG CACAGGTAT  
 TGAAAGCTAT GGGTTGGCAG GAATATCCTG AAAATGATGA GAATTGCCTT CCCCTCACAG AGGATGAGCT CAAAGAGTTC  
 CACATGAAGA CAGAGCAGCT GAGAAGAAAT GGCTTTGGGA AGAATGGCTT CTGCGAGAGC CGCAGTTCCA GTCTGTCTC  
 CCCTTGAGGA GCACTTGCAA GCAGAGTTG AGGCTCAGCA CCGA

SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GGCAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATTGTCCCC TTTACTTCCT  
 GCTATCTTCT TCTCCTCTTC TTCTCTCTCT TGCCCTATG CCGTATTTT TGGCAATATG ACAGGCTGCT CTACCCAAGA  
 TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTGGGGAG GGTCTTAGCA GCCCTGGGTG GCTGCCTGTG CTCAGGTCTT  
 CAGCTCCATG GGAAATAAAA ATGGCACCTT GAATCTCTAG GATTTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTTCCTC  
 TTGTCCCCC GTTGTCTGCT CCTTGGGTGA TAGGACATGG TAAATATTTA TTACTTTCAG GGAACCAGTA TTTTATTAG

SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC  
 TCTCAGGGAG GGCAAGGCAC AGATACCCA AATTCCACCC CACGTCCAA AGGTCTCCA GCGGGGCTGT CCAGTCCATG

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TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGA GAACTAAGCG AAGGAGGCAA ACGCCAGGGC  
CCCTTGCAAGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GTTCCAATAG CTGGTTTAT TCTCAGCACA AAAGGGCCCT GTGTAAAAAC CAGAAGGATT TTGTAAAAATA TCAAAATGAA  
TATTTGGCCT GGAGGTTGGA AAGTGAAGCA AGGCTGGACA TAGAAAAAA CTGATCAGTA GTTATTCAGG ATATTATTTA  
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CTACAGGTTT TTATCTGGGT CAATGAAGAA ATTGTGTTTA  
TCTTGCTGCC CTGTCATCAG GTTTTGTGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCT TTCAGTCTTA  
GCTTTTACAT CTTGCCCTTG CAA

SEQ ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGGGCTC CACCCCTTC ACGTCATCC CATCAACAAG ATGTTGTCT GTGCTGGGGC TGACAGGCTN CAAACAGGCA  
TGCGAGGTGC CTTTGGAAAG CCCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTTA TCATGTCCAT CCGACCAAG  
CTGCAGAACA AGGAGCATGT GATTGAGGCC CTGCGCAGGG CCAAGTTCAA GTTTCCTGGC CGCCAGAAG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTCACCA CCTCGGACTC CTGCGACCCG ATCAAAGACG AATTTAGCT ACTGCAAGCT CAGTACCACA  
GCCTCAAGCT CGAWTGINAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CTTCACTATK TGATGTACTA CGAGAKGTCC  
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAGGCT GACGGGATTT GTGCCAGGT CCTGCCCTAC  
CTTTCOAAG GAGCACCAGC AGCAGGTTTT TGGGGGCCAT TGAG

SEQ ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCTTGRATT GACGATGGTR CAAACCAAG ATTATCTCA  
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG  
ACGTCACAGA TACAACCGGT CGGGCACATC TCKGGGCTA TGCTGCCGGT GGTC

SEQ ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATGG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG  
TGAGTGTGCC AGCACCAGCC TGGTGAATCC ACGATTGGT TCCCATCCA AGGGTAAGTT TCCCAAAATA CCG

SEQ ID NO:191: (Length of Sequence = 316 Nucleotides)

GTATTTATAC ATTTATTAT ATATGTATAT TTAATTGAGA NGAAACGAAC ATTTGGGGA CAGGAAGCAA GCAGGCCCGG  
GGCTGCTCC CTCCTGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT  
AACTGGGAAG TAGGGKGGC TCTATGCACA CGCAGGCTT TAAGGGTGCA CGGTATGGC AGKGGTTTG CACTGGGAGG  
CCATATGTAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GIGGTTTTTG GTTATATGCA GCTTTGACT AGCATGTATT GTGCTTTTT CTCTCTATG AATAATTTTA TATTTATGC  
TACTTCTGA AAGTTTACTC TTGATGCTC TAAGAGAACA GCCAGATGGT TTATATGAAT AANCTTTATC TGCAGGATGG  
TGGATTGGTA AATNAGGAGA ATGTTGTTG AGATATCAAG ATTTATGCT GGGAACTAAA ATATATAATG CCAAATGTGT  
TTTTGTCAAT TACTAGAGAA TTCTGTGCAA ACATATCATC TCTTCACATG CTGCACACTT TGCTTTTTGT TAAACAGCAG  
GTAGTAGACA GACCAATACC AGTTTCGGT TAAGG

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SEQ ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA  
 CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG  
 TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC  
 AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKITC TCTTGGCCTG  
 GGTGCGCTG GGGCATGCGT CTAGCTTTCA CTCTGGTTCA GGTCCAACAG GGTCCGTTCT GTGCCTTTGG TGCCCCC

SEQ ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATTGGC TTGTCTTTCA TAACATGTAT TTTAAGTAT TTACTCTCTT AATGGCCCTC GTGTCTATTT TATACATCAT  
 ATCTCTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT  
 GTATCCCTTC CTCRGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEQ ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTTGTATGT TAAATTATGT GGGTTTTCAA ATTTGTGGAG AATAAGTAAT AGTGACATTA GTTTAAGGAC  
 AGTGTTCAT CAGGGCATT A TTTTAATGAA TCTTATATTT AAATGTCTGT TTCAGGAATT CATGTGAATC TTTCTTTTAA  
 TAGAGGACCC ACAGGCATGA NITATTTACT CCTCCGGTGA TAGGTTCTCA CCTGTATGAA AGCGGAAGCA AATTCCAGGT  
 TAGAACATTA TNCIAGTTAT GTAGGGGGGT ATAAAGTGTG TAAGTTTAAT ATTT

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTTCT CTAAATTTTA AAATAGAAGA CTTTAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT  
 ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAAGCCC CGTCAGTAGT ACACATTCT CTATGGTCCT TCAACAGTTT  
 TTCATATACA AAATTTTCTG CTATTTTTCG TTTTGCAAAC AGCAATAACT TTTGGGTTTC CCAATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CCTGGAGTAG CTGTGCAGCC CGCCCTCTG CTTCCCCCAG CCTCAGGCC AGTGCCAGGA CAGCTGGCTG  
 CTGACAGGAT GTGCACTGC TTGAGGAGGG GCACCTGCCA CCGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGGTA  
 GGGAAAGKTG GGGCAATGGG GAGAGGCAAA TGCAGTTTAT TGTAATATAT GGAATTAGAT TCATCTATGG

SEQ ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCTGGG GAAAGGGCTG TTGCTGAAGT GGCCGGTTTT TTTAAGCATC GACATTGCA TCCAAAGGTT CAAGCAGCCG  
 CCTCAGGTTT CARAGGCTTC CACCTGATGG CTGCACTT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGTTAAATGA TGTGTGTCAGT GCCTATTTAA AAACTACTC TTCCCTTCT CTATGAGTTC TACTTTGGTA  
 AATATTAATA TTTAACCAGT TAGTAAAACT AACACCACTA TTTCAATTCT CTTTTGTGCA TAGTAAGTAA ATTTTGCTTT  
 ACTTACTTTA TAAAAAATA CTTTACATTT TATAAAGCAG GTTTTAGAAA AACGGTTTAC AAGAAAGTTT GCCTCCATTT  
 CACTGCCAAT TTAAGCACAG GGGAAAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGTT TGTGAAAAGC AACAGGGGTA NGACAGGTTT AAGGAAGGAC ACAGACAGTG CCTGTTTTGA GGTTCCAAAT  
 TTCTTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATGT CATTGTGAAG GGGCAATGAC TTGTCAATNA TGCAGAACAT  
 GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAAAGTGA TGTGTGTGAT AGGAGTATCC CTTTGGAGCC

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AAAGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGTCG GGATGCTGTA CTCAAATACC  
 TGCTGGTCCG AATGAGCGAT GACAAGGTTG TTTGGTATTG GGGGCAATAG CCATAGCAGT CACTTGGGAA ATTGTAAGCA  
 GGCACCGTGC AGTGAAGTTT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTCCACGCT GATGAACCGG ACGTCCATTT CTCGAAGAAA TTCCTGAACG TCTTCATGAG TGGCCGCTCC CGCTCCTCCA  
 GTGCTGAGTC CTTCGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACCGGGCCAT ATTCAGGTTT  
 GTGCCTCGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCCTCTGC TAGTGGAGTC CAGGCCCCCA GACTACTTGT  
 TACGAGGGCT ACAACATGTG CACTGGGTGC CCG

SEQ ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCCAGGAG GCGAATGCT GAGCTTGGCA ATGGTGGCCT GGATGGAGCT GATGGGCACA TCCCCACCGA  
 GGACCAGTTC CTGGGAGTCC TGAGGAAGGT GGTTCCTCTG GCTGATGCTT GCACTGGCCA AGGGTTTGCA TGGAGGAGGC  
 ACACCATGGC GCTGCAGGAC CTGCTCCACG TGTCACCA CTGCCTCATA GCAGAACCTG AGGTGCAGCT TCTCCTGCAG  
 CATGTGCTTT CTCGTCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCCCTT CCCAGCCTCC ACCTCCTGCA  
 CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGGCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC  
 CGTGATGCAA GGTAATTTCG GTGCACCTCC TGGGTT

SEQ ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGINT TGGGACACT TACGCCAAGG CGCCGCTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC  
 TGTCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTKTGA AGCTCTGTGC TTCAITTTTT  
 TTGCTTTGCC TCTAGTTTTG CCTTTGCAGT ACCAATGCAG CCAGCCCATG TKTCCCTCT ATGTGGAATG TTAAGATAT  
 TCCCAGTGT TCTGGTGTCC TTTCTGTAAT CAGAGCTGCC GTGACCATTC CAGTTCAGGC ATCCTGGTGG CCTGGCTTTC  
 TCTGGGGCAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCOCCA ACCOCCATCG TCACTCTGCT  
 GCAACACGAC ACAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC  
 CCCACCCCC ACCAGGCCCTG TTTGCCCCAG GTTGCCCTAG GATGGAGSCA GTTCAGACCC TGGGTCACTG AAGCTGATAG  
 GAAGAACTNC GATATCAATG GCCTAAGCCT GCTGTNTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGGC CAATTTAAG  
 GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCCGAG GGGAGCCACG CCTGGGCCG GCAGGGCACA TGG

SEQ ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TGAGCTGCCA CCGCTGGAGG ACATGGGACA ACCCCCGGCG GAGGAGGCTG AGCAGCCTGG  
 GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCCGAG CCCGCCCCAG CCCCGGCCG AGAAGAGTGG CTGGACATTC  
 TGGGGAACGG GCTGTTGAGG AAGAAGACGC TGGTCCCAGG GCCGCCAGGT TCGAGCCGCC CGGTCAAGGG CCAGGTGGTC  
 ACCGTACATC TNCAGACGTC GCTGGAGAAT GGCACACGGG TGCAGGAGGA GCGGAGCTG GTGTTCACTC TGGGTGACTG  
 TNAOGTCATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGTNGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

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CITTACTGTG GGTGTGGTG TCACGTGAC TGCCACAGCC ACTNGGAGGG ACACACAGCT TTAACCCCTR TTGCTTAGG  
NGAAGGGTGG GGGCATTGAG GGTATATAAA CTAATATAT ACACAGAAGG TCCTAGGKAG AAAGCCACCC TGAGCACACA  
TGCTTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTAT TGAATATTGG TTAAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG  
TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACIT TCAATCACAA CTCAAATATA  
AAATAACCTA CAAAATCACA TTGCTATAAT CAATATACAA TAATGTATT TTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGTT GCAGTGTATG GAATGCTAAA TCCTACCCCA AAGGGCAAGC AGGCTCCAGG  
TGCCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCGAGGA GAAAACATGT CCAAAATCCT AAAAGCACGA  
TCCATGGTCA CCAGTGCTT TAGAGATCAC TTCCTTGATA GGGGGTACTA TGAAGTTACT CCTCCAACAT TAGTGCAAAC  
ACAAGTAGAA GGTGGGTGCC AACTCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT  
GTACTTGAGA CCTTCTCCC AGCCTGGGAG ATGTTTTTTG TATT

SEQ ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGTCAGG AGTTCGAGAT CAGCCTATAT ATGCAAGTAC ACACACAGGC ACTCGCACGC ATGCATGCTC  
ATGCAACACA CATGTACACT CTACATGTAC AGCTCACATA TGCATCCATA CACATGTGCA TGCTCACCCA TACACCAGCC  
ACACACAAGT ACTCATAAGC ATACATGGCC ACACACAAAG TACACACAGC TACACCATAT GCATATGTAT GCACTCATAC  
ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATAACACG  
GGACATTTCA TACACAG

SEQ ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCTNAGGA GGCTGAAGAA GGCATCTCTG AGCAACCCCTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT  
CCTTGAGGCA AGCGTAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA  
CAATATGTCA ACTTCCCTTT GGCTGCACT TTGTACAAA TCCTTAATTT TTCTGAATG AGCAAGCTTC TCTTAAAAGA  
TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAGCCTCA TGTTATACTA AGGGGGAGTC TTCCAGGTGT GACAATCAGG  
TTATTGGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGA T

SEQ ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTTGACATT ACAGGCGTGA GCACACGCAC CCAGCCCATC TAGCATAATG TTTTGCATAG TTGTCAGCAG  
ATAAATATTG AATGACAAAA CTCAGATGGA GGAAAAAGAA CAAAATAACC TAGTTCTCAG AAAGATTTAA TGAGCAAATG  
GGAAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTAGA GTCACCTGAA TCACACAGGC CTTCCCTCAG CTTGAGGGGC  
TGCTTGAGG TGGGGGTGGG GGTACACCTC CTCAGTGGGG AGAGACTTGC CAAAT

SEQ ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCCGATAT GAGGGGGGTG GGAAGGGGCC CGCGCTGCC CCCGCCCT CCCTATGTCA TTCTGAGGA GGGGGGGATC  
CGCGCATACT TCACGCTGG TGCTGAGTGT CCCGGCTGGG ATTCTACCAT CGAGTCGGGG TATGGGGAGG CGCCCCGCC  
ACGGAGAGCC TGAAGCACT CCCACTCCT GAGGCCTGG GGGGGAGCCT GGAAATCGAT TTTCAGGTG TACAGTCAG



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CAGTTTGGT GGAAGAGGGG GGCCCTAGAA ACCCTGTAGC GCAATGGGGT TGGGCGCCCC AAAGGTTAAG TTTGAACCCG  
AAGAGCAAAG GAAGAGGCGA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEQ ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCTGTGGAA TAATCTGCGG GCTAACACGG ATAACTCAGT ATAAGAACCA CCCAGTTGAT GTCTATTGTG GCTTTTAAAT  
AGGAGGAGGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGAATTTCC TGGCCANTGA TGAGAGTATG TTTGAGCACA  
GAGAGCCCCC CAGGCTCTTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT  
GTATGGGAAT TTTCTCATAC AGAAGGGCAT CCTCAAACC GGAAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTCGAC GGCCAGGTGG TGAATGTTGG GCAGAGAGCG  
CAGTGINGTA GGGGAGGAGA GGTGGTGTCC CTGCTGCTGT GGAGCCAGCC TGCCGTGINT GTGGGCAGAG CAAGGCACCT  
TCTGCTGCCG GTGCTTCCAG GGCTAAGCA GCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGGA ACGAGGGCTG  
CTACCCATTT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTGGCCA NAGCAAGTGC GTAACAGGCC CTGAGAAGAG  
NGCCAGTGAG CTCATCCTGA GTTAATTATG GGCT

SEQ ID NO:215: (Length of Sequence = 260 Nucleotides)

TGGTCAAAG TCTAGGCCCT CTNAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGGGCT TCCTCTGTCC  
ACAGCATTAG CTGCGAATAT CCTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCCT TGTTACATC  
CAGTGAAGA GTGACAGCCT GCTCCCTTA GCTCTGTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGCTTTTC  
CTCATGACCC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTTGGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTT TCTCTTCCC TTACTGTCTC CCAAATAAAC  
AGTCTCTCAC TCTGTGTGA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAATTAAG GGGAGAGAGG  
AAAACAAAAC CAACCAACCC CTAANATCAT TTTTATTATG TACATAACGA CCTCATCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTTT TNCCTGTGGC TGCTATGGAG TCCCCCAAAC TCCCAGTGG GGCTTATGAG GGTGGGGCAC  
TTATTANGIN GTCTGGGAAG CTCATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT  
NTCTCGCAG ATGACCAANA TGTTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEQ ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGTAGC AGAGACCAAG GCGCAGGGTG CTTGAGATGA GCAAGAGAAC CCAGTGAAC CAGATACCCC AGGTGGGGCG  
GAGGGACCCC AGACCTTCAG AGGGCTGCCC TGGTGTCTC CACAGTGCAG TCCCTCTGTA TTCCCAGAGT GGGATCGGGG  
CTTTCAGCCC ACCCTGATGC CTGCCCTCCA GGATGGCTGG TTAGTCTGG GTCCATGTCC CAGACCCCTC TATTCTGCTC  
CAGGACAGCA GGAATTCAGG TCTTTCCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC  
ACTTGCCAAG TGATTCACTC TTAGGCCAG GGGGAACACA ATGACTATCA TTAGTGTATC AGACCTGGCT

SEQ ID NO:220: (Length of Sequence = 382 Nucleotides)

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TTTTTGT TTTTAAATAT TTTTGATATT CTCTTTCAT TGAAATGGTA TAAATGAATC CATTTAAAAA GTGGTTAAGG  
 ATTTGTTTAG CTGGTGTGAT AATAATTTTT AAGTTGCAC ATTGCCCAAG GCTTTTTTTG TGTGTTTTTA TTGTTGTTTG  
 TACATTTGAA AAATATTCCT TGAATAACCT TGCAGTACTA TATTTCAATT TCTTTATAAA TTFAAGTGCA TTTTAACCTCA  
 TAATTGTACA CTATAATATA AGCCTAAGTT TTTATTCTATA AGTTTTATTG ANGTTCTGAT CGGTCCCTT CAGAAATCTT  
 TTTATATTAT CCTTCAAGTT ACTTCTTAT TTATATTGTA TGTGCATTTT ATCCATTAAT GT

SEQ ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTTTGGTT TATTTAAAAA ACAAGCCAAA AAAAAAAAAA AAAAACCACA ACTTTATATA CAAAGTCAAA CTGAAACCAC  
 GGWTTATGGA AAGAGGCAAG AWTATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA  
 GCCACGGGAA AGAGGTGCTG GTTCTCTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA ACCCCAGCCC  
 AACACTGAGC TCTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCCTCC CCCAGGAGGC CTGT

SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCTTCTCT GCGCGGCAC GTGCNAGCA GCCTGCTTCG CCCCCTGCTC AACTTTGAGC TGGAGGAGAA GCAACTTTGG  
 CAGTGGCCGC GGGGTGGGAA TCCCGCTTCT CCTCGGCAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT  
 TTCGCGCGCG CATCAGCGCT TGCTTCGGAC TGTTTGCAAC GTGTTTCCAG CGAGCTGGGA GCGGGGGTTG TGACTGCGAG  
 TGTCTGGGG GAGGGGGACT TGTTTTCTT TTCTCTAGA GACCTCGCT TTCAACTGGA TCAAACGTTG TCGAAAGGAT  
 GTAAATAGGC AAGAGCAAAC TG

SEQ ID NO:223: (Length of Sequence = 376 Nucleotides)

GTGATGGCTG CCTTGAGGGG GACCATCATG TCGGAGACGC ATTGGTGCGAG GTCTCACCCC ACAGCCCATG CCCAGCCTCC  
 TGCAGACTCA GGTCATCCAG CTGGTCGATG GCTCTTTGCA TACCTGGTGC CTCTCTCTCT CCGGCTTGGC AGGCTTCTCT  
 GGGGGCTTCT CAGATGACTC TTTTGCCCTC TTCTCTGTCT TGGCTAACTC CTGGCCAGC TCTGAACGTG CCTCCTTGGC  
 TCCCTCTTCT ACCACCTCT CCGTGTGGC CAACTTGCTC ACGGCCGTCT TGGTAGTGGC TTTGAGGCTC TCCTTGCTAT  
 CAGCCCGCTG TTTGATTTTG CTGGGCTTGA GGTGGTAAG GCACAGCCCC AAGAAG

SEQ ID NO:224: (Length of Sequence = 445 Nucleotides)

GTGTAGAGAC ATTGGCATTG GGGTTGCTTC CACCTTTTGG CTGTATGAA TAATATTGCT ATGAACACTA ATGTACAATT  
 CTTTGCTGA ACGTAAATGT TTTCAATTCT CTGGGTATT TATCTAGAAA TGAAATGCT GTATGTTAAC CCTTTGTTA  
 ACCCTTGAG GAAGTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTGTTGA GGGTTCCAAT  
 TTCTCTATAT CCTTGTTAAC ACTTGTTATC TGCCCTTTTG GTTAGAGACA TCTAGTGAG TGTGAAGTGG CATCTCACTG  
 TGGTTTGAT GTGCATTTCC CTGATAGCTA ATGTGTGGA TCCCTTTTGC TTTTAGTGA ATGAAATATC TGGTAGTCTC  
 GTATGCCAAA CTAAAGCTAA AATTAAAATG ACTCTGCATG ATGGA

SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TGCTCTGGG ACAGTTTCCC GGGCAGCTCC TGGCCAGCTT CCAGCCGAGA GTCTCAAGT CCAGGGCACC TTGGGCCAG  
 CGCAGGCAGA ATCCGAGGTG GTCTGGCTC TACCTGGGC CTCTACTCC CCAGCACCCC TGGAGGAGGC AGGGGCTCCC  
 CGCCGCCGAG GCTGCCTGCC CTAGGCCAC CTCTGCATGC TGCTCATGGG GCCACCCCTC CTCTGGGCC CTCACTCTGC  
 CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCCAGGGAG GTGGCCCTCA GGCTGCCAG GTGCCTGCAC CCCAGCCGGG  
 CTTCTCTGGG GCCTCCCGT CGTCAAGCCT ATATCCTGTC TGTCGCCACC CCAGCTGTCC CTGCCAGGG GACTGGCATA  
 AAA

SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GTGCTTAAG GAGAGAGATT GTGTTCTTCC TCCTCAGGG GTGATAACTC AGGAAGCCTC TGGGTTGGGA AGACCATCAG  
 TTCTTTTGTC TTAGGTTTCT TTTCCTGTCC CTCTTCCATC CCCAAGATGT GACCCCATAA AAATTTTTC TGAATTGGCC  
 AGGCATGGTG GCTCACGCT GTAATCCCA CACTTTGGGA GGCTGAGGCG GGCGGATCAC GAGGTCAGGA GTTCGAGACC  
 AGCCTGACCA ACATGGTGAA AACCCCATCT CTACTAAGGA TACAAAAATT AGCCGGGTGT GGTGGCACAC ACCAGTAAGT  
 CCCAGCTGCT CAGGAGGCTG AGGCAGGAGA TTGCTTGAA CCTGGGAGGC AGAGGTTGCA AGTTAGGCCG GGATTGCGCC  
 GTTTGTACTC CAGCCTGGC AAGCAGAGCA AGACCATCTA

SEQ ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TTCGGTTCG AGGAGCCCGT GGTTCGTCT GACCTGGAGC ACCAGACAGN CCACCGGCAG TGGACTCAGC  
 AGCACCTGGA TGCCGCTGAC CTGCGCATGT YTGCCATGGC CCCACACCG CCCAGGGTG AGGTTGACGC CGACTGCATG  
 GAGTCAATG TCCGCGGCC TGATGGCTTC ACCCGCTCA TGATCGCTC CTGCAGCGG GGCGGCTGG AGACGGGCAA  
 CAGCGAGGAA GAGGAGGAG CGCCGGCGT CATCTCGAC TTCATCTACC AGGGCGCCAC TTGCCACAAC CAGACAGACC  
 GCACGGGCGA GACCGCTTG CACCTGGCCG CGTTACTTA CGCTCTGATG CGCAAGGCG TCTTGAGGCC AGCGAAGATG  
 CCAACATCAG GCAACATGG CCGAAC

SEQ ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT  
 TGTTTTAGAA AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAATT CACTGTATTT  
 CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAAGCTG TCCTGATCAT ATGGCATGCA CACCAGACTG CAAAAGGCG  
 TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTTA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTCC CAAGCCTTTC TGA CTGACTT TAAATCTCT CACCTGCAGA ACAGAGATGG CTTCAAAGTG GGGAGTGAGG  
 GAGTGAGCGA GGACCTGGG CTGAGACCTG TTTTCTTCC ATTTCTGCTG TGGCTTCCA CAGCTCCCTG GTTCCACACC  
 AGGCCCTGCT CTGCCGAGA AAATGGATTC CCAGGCCACA GAGCTGTCAG GCCTTTGACT TTGCAGAGAC CAAGCACCCC  
 AGAGGCTGTG CGACAGGCT AGTCCCTGGT GGGCCGGTCT GGGGCATGGG GGGCAGGAG ACTKGGAGAT GGGGAGGGCG  
 TTGAGAATCC GGGGGTCTT GGATCTTGA CAAATTGGCT CAGGCTTAG CTYTGGYTGC CCCACTGATT GTGTTGCTTG  
 GCAAGGTGCA AGTYTTCGGC TGTTC

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCTT CCTGCAGCAG GCGACGAGC TGCACAGGGG TGATGAGCAA GGCAAGCGG AGGGCTTCCA  
 GCTGTGCTC AACACAAGC TGGTGTATGG AAGCCGCGAG GACTTCTCTT GCGCCTGGC CCGAGCCTAC AGTGACATGT  
 GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG  
 GGGGATGAGA GTTCTGACTG TCACCTGTGG TATGCGGTGC TTGTGGTCA GCTGGCTGAG CATGAGAGCA TCAGAGGCG  
 CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTTGACAA AGCCATTKCT CTTCAGCCAG GA

SEQ ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTTGA ACCCAGGAGG CGGAGGTGTC AGTGAGCCGA GATGGGCCA TTGCACTCCA GCCTGGGCCA  
 GAGCAAGGTT CCTTCTCAA AAACITGGAA ATCTGTGGG AAGTAGGGG AGGGCAAGGT TAAACCTAT GCAGGTGTGT  
 CAATTAGACT TGTTCAACT TGAGAACCTG AATTTTGCAT GTAATTGAAA TGTTCCAGAA CAAGTCTGCG AGTTTCATAA

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GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTACATTA GGGGAATGAG CATGGGATAG GTGCCTCCCA  
GTTGGTAGGA TAGCATGAGG AGGTTTCAA AGTAACCSCT TTAAGGGTTA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TTTATTTGCG TATTTCCAGT TTGAAGCTAC TATCATGGGC GTTTAGAGTT ATACAAATGA  
CACTTACAAA AAATAAAGA CCAAGACACC CAGAGTGAGA TGCATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGCCC  
CGGCGGYTCA CCCCAGGGCT CCGGAGGGG CGACGCCTGG CTTCATCCAC CCGGGAGGCC CAGGGAGCAC CAATCAGAG  
AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

SEQ ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTTTACAGT TTTATTTTAA AATCATTTAC ACATATTCAT ACAAAGAAAA ATAAATTTCA GGATGGAATC CTGGGGACCA  
TGGTAGTTTA AAAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT  
TAGTGTATCT CCCCATGCAG GGGACAAC TG AAGAATCC AAGCTGCTCC CTCATCTTCC TTCGATCTAG ATGGGGGAAG  
GGGATTTTCC AATGCTCTCC CCTAGAAACA TTTCAAGAAG TACAGCAAAG GCTTATGGTA ACACTGGAAC CTATTTGCTA  
GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTTCCT ATAA

SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GGCCAGGAGC CAGAGGGCCC CGGGGCCACC CCTGCCGGG AACGTGATGA CCAGAGTCCA GACAGTGTCC CAGAGAGGCC  
GCGGCCCCGA GACCGGAGGC TCTGTCTGCC CTNCGTGGAC GCCTCGCCAC TCCAGGGAG GACGGCTGC CCGTGGCTGC  
AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCTTCCA TGGCTACCTG GACAATG

SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACTTTAAAG TTAGGATTTT AAAATATTTG TAAC TGCTA AATTTTAAAG TGTGACAAA TAATTACTTA GGTTCAGAAA  
TATACACACA CTTACTCTTT AGCCAGTTTC TTTCAAGGTT TACTGTCCC ATCAGATATC TAGCCATTTK CCTTTGCAAA  
TTACATACCT TCTTAAGAGT GTATTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGT TTCTCACTCC TTAGGGACAC GATTGGAAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGGTTATCC  
CTGAGCTGGG CAGTTTCACA CAATCANITT TNCTCTGAGG CCAAAGTCTG TGGTTTGATC ATCTTAGCAG CTTCCAGAAC  
AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATTCTCGG TGCTCAAAGA AGAATGACCT G

SEQ ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCTTTC TAAGATTCTC TGTGGGAAAA TGACTGTCAA TANAATGCGG GTTCTGGGC CATTCGTCTT ACTTTCAATT  
TTTGATTACA AATTTCCTTT GACGCACACA ATTATGTCTG CTAATCCTCT TCTTCCTAGA GAGAGAACT GTGCTCCTTC  
AGTGTGTCTG CCATAAAGGG GTTTTGGGAA TCGATTGTAA AAGTCCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG  
AACGTGTAG T

SEQ ID NO:238: (Length of Sequence = 327 Nucleotides)

GTTCGTGGCT GTCACAATAA TGCTGTGATA ATGCTGTGGT TTCCAGCAG GGAGGTGGGA GCGGGGAGGG GGCTGCAGCC  
TGATGAGAGC CAGCTGAAGG AAGAGCTGCC TCTCCCTTCC TAAGCCCTT CCCAAGGTCT GCCCCACCGC CCAACCAAA  
GACCACTCCG AACAAAGTGA GGATGTGGAT GCTCTGTCTG GTTCCGCTGT TCCGAGAGG GAAAGAAAGG GTAGCTGCAC

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TGACCCCACT GTCCCATAT ACAAGGGTTK GGGGGCAAGA GCATGTGGCT ACTCCAGCA AGGGRAAAAT GGGAGGAGCA  
GTAGAAA

SEQ ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGTT TATGGTGCTT TAAACCTATC AAAATAGTTG TAAGTAAATG GATTTCTTGT NCTCCCAATA ACAATTCTCT  
GAGCTAGGAT AGATGTCTTT CTGGCCATTT TACAGGTGAT GACACTGACA TAGGGACTGA GTGGGTAGCT TAAGTNCAT  
GGTTACCAGG AGCAGGACCN ACGTTTCCTG NCTCCAGTC TCATCTGT TTCCACTGAC CAGGTGCGTT GCTCCCTTGG  
AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGGNGAA GAGGT

SEQ ID NO:240: (Length of Sequence = 349 Nucleotides)

TTTTGCCATG TTGGACAGGC TGATCTCAA CTCTGGCCT CAAATRATCT GCCCAGCTTG GMCTCCCAA GYGCTGGGAT  
TACAGATRTG AGCCACTGCA CCCAGCCTGA CATGCCATAG TTTGAGCATT TTCTTGGGCA ATGATCCAAG CTGAAGGCTG  
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAGG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG  
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCTCTGAAG ATAGGTAGGC CAGGCTGGCT  
TAGCTGAGGC AGTGGGTTAG ACCAGCCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GTGCAGCGGT CTGCCTTCAT CTTTAAATGG CCGGTGCGGT ACAGTTAGTG GACAGACGGG GGATGGGACA CAGCAGGGGT  
GAAACAGGGC AGTCACAGCC GGGGCCGGG ATCTGGAAGC GGGGCGGTCT CTCCCCTGG AAACACCGTN TCTGGAAGGA  
CACCTTAGG ATCCCCTGAC CTCARGGTGC CACCCACAG GGCCTGGTGT TCTGGGAGGC CCGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATAATGACTA CATTGGTGG AATACGCATG TACAATCTT CAAAATAGT AAAGAGCAAA ACAACAAA AATAGTAGAA  
GCACTGGAGA AATACACTAT GGCATAAAT AGTTACGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT  
TCTTACCTGA CTCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTATAT  
CCTAAGCATT TTATTTAGC TCAAAATATA AAAATATTCA TCAGTTAGCC AAGCTTTTGN GATGAGAGAT CATAGCCTCC  
TCTTTGATAG GGGGTTTCTT GGGTTTCCTT GATTTCATGT TTCAGAGTTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG CCGCCAGAC CTACTGTCCC  
GGGGGTGTTA TGGCTGTCCC TCGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG  
GAGCTCTGCC CTGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CGCAGGGACA TGCACAGCAG CAGCCACAGC  
CCCGCGGACG GGGCAT

SEQ ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TTCTCGAGAA TCGACGAGGA ACTTAAATCT GGACTCAGGG TTTCAGTGG GTCTCCGACT CCCACCACCC  
CGCCCCCTCG NCTGTCTCGC CGCCAGNGT GACCTCCAGC CGAAGGAATC TTCTTCGGAT GGGTGCACCT TGCCAANAGG  
TGTGGCACCT GGNGGACTAG GAGGCGCCTC CANACTAAGG GCGCTCANTG CGCGTTCTT

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

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TTCAATGCTCA TGTAACCTTC TTAATAGTGC CTGTCTGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACT GGCCCTATAA  
 AAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGTCTCTCTT TCTTCTCTCT  
 CCTGCCATGT GTGTGTCTCT CTCTACTCCT CTGATTTTGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCCTCCG

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GGTTTCACCA GCGTTTAATG TGCTCTGATG TTGACCGTCC CTCTNAGTNT TCTGGGGAGG AGGGGGTGGG GCGGAGGGTC  
 AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTTGTGGG CCCAGAGGGG CTGTCCAGGT GGATGCACCC TGCCCCCTCC  
 CTCGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCGNC AGCCTNTGGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC  
 ACCATTACCA CTGGACCCAC CAAAGACCC

SEQ ID NO:247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCCTTCCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG  
 CTGGGTGCA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAAA CGCAAGGGAA  
 GCTGAGCAGA GATCTGCACA CTCAACCCCA TTGATATTCT TCTCCTCCT CAGTCATGGC CAGCGTGTG GTGACTAGAC  
 CGGTGCCAAT AGTCCGGTTG CCATCTCGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGCT GGGCTGGGAG CAGCTGCTCA CCACCATGTC CCGCACCATC  
 AACGAGGTGG AGAACCAGAT CCTCACCCGC GACGCCAAGG GCATCAGCCA GGAGCAGATG CAGGAGTTCC GGGCGTCCCT  
 CAACCACTTC GACAAGGATC ATGGCGGGGC GCTGGGGCCC GAGGAGTTCA AGGCCTGCCT CATCAGCCTG GGCTACGACG  
 TGGAGANCGA CCGGCAGGGT GAGGNOGAAG TTCAACCGCA T

SEQ ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG CGGCCCTACC CCTGCTCCTA CTGTGGCAGG AGCTTCCGCT ACAACAGAC ACTCAAGGNC  
 CACCTCCGTT CAGGCCACAA TGGAGGCTGT GGGGGTGATA GTGACCCATC AGGTCAGCCA CCCAACCCAC CAGGTCCCCCT  
 CATAACTGGG CTTGAAACTT CTGGCCTGGG TGTCAACACT GAAGGTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT  
 CGAGGGGGAG TTTTGTAAAT CCAAATCTCT GTGGNTTCAT GCTTTGTATA TGCTCACAGC AGGGCACAAT AATCCAAGAG  
 AAGGTCTGTG AGCCCCNATC CAACACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

SEQ ID NO:250: (Length of Sequence = 397 Nucleotides)

GTATCCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAAACTG CTTTTAACAT  
 GGGCTGTATA TAAAAATATT AAAGAGAAAC AAAACTGTAC ATTTCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC  
 CTTGTGCAA ATATTTTTCT CCTATAGCAG TAAGTACAGC ATTAGAAGGT GATTAGAGAG TCTGTTGATG AAACACAAAT  
 GTATGTTTTT ATTGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT  
 GTGTGGGGGT TAAATACCTT CCCACTTGCA AGTGACTTGC CTGTNCCCGC TGCGGGAATC CTGTNTCTTG GGTGGGA

SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCCC CAAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT  
 ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCTNCCCGC ATTCCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT  
 GGAGAGNGA GTNAAGGCAT CCACGAGGTC CTGGTGTTCG CCATTCAGAA GTCANGACAT GGACCTGCGG CGCAGCCTTT  
 TCTCTAACAT TGTCTCTCA GGGAGGGNTC TACCCT

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SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGACTGTTTG GGGGTCTCCC AGTTTAAGCA AGATATTTAA GCCTTATTTT TCTTGCCATG  
CTTGGATTCC CCAGTAAAAA AACTCTCTGC CTGCGGCTGA CAATCAAAGT TCTGGGAAGT AATATGGATA AGCAAGCTGG  
AAATGGAGAA GGCTATTCAC TGTCCTGGG TOCTACTGTT TTCTGGNTGG GAACGTCTTT TOCATTAGGC CTGGTGTGCC  
CTGGAAGGGA NGAGCCTCTT GCAGAGACTA CAATCTTGA TGGGTCTTT GCCAAGTTG AAGGTAGGAA CCA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCAGCCAA GTGGTGAGG GCAGCTGTT CTAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC  
TCAGCCTACC CGTAACTGC CACCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC  
CAAAAACCA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGCGAG GCGGGCAGTA GAAGAAAGGA  
AACAANCACA AGTGGGTTC ATTACAAATA GACATGAAGC CTGAAGTGCC CAG

SEQ ID NO:254: (Length of Sequence = 413 Nucleotides)

CTTTTCTTA ATATATTAAT ATTTACCAAG GCAAGACAGT GATTTATGGA CATTTAAATT AGTTTAGCTT TGTCTGCTG  
TTCTAAACA TTGTGTACTG TCTGATAGAC TTTAAAAA CAGTGCTTTT CCAGGATGAT TTATGATATG CAGTATTGTT  
TATAGATGCC CATGGCTTAA CCTTGAAAAG TCAATTAGT GACACAATTA AGAGAGATAT GAATAGTGGT AGAAAAAGCA  
TGTACTCTGG ATAAGTGGG GTAAATCTAG TATTTGTAT TCCTGTCAGT AATATTGTCA NTAGTATTTT TTAGAAGGTT  
TAATTTTTT ATGGGTATA AATTCATGTC ACTCTCTGC AATGGGTACC ATCAGTGGGA ATGCGGAAT TATCCATGCT  
TTGGGGGTTA AAA

SEQ ID NO:255: (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TTGTACCTTC TCTCCTAAG AGTTACAGTG AGTGACTCTA  
CTCCTCAAT GGAGCACCTC TCTCCAGGAG AGTAAGAAGA TCACATAAAT AGAAAGTGAG CTTTGGACTC TAACAGACAT  
AGGTCATAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAATGGG  
TAAATAATA ATACCTCCT CTCAGAAGTG TTACAAAGTT TATATGAAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG  
GAGCTTAGTC ATTGTTTATT TTCTCCTCA TACCATAACA TGNITCATT CTACTG

SEQ ID NO:256: (Length of Sequence = 241 Nucleotides)

GTAGAGATGG GCTCACTATK TTGCCAGGC TGGTCTGAA CTCCTGAGGT AGGAGGATCG CTTGAGCCTG GGAGACAGAG  
GTTGCAGTGA GCCGAGATCA CGCCACTGCA CTCCTGCCTG GGTGACACAG TGAGACTCTG TCTTAAACAA AACAAAACAA  
AAAAAGGCCA GGCGAGGGG CTCACACCTG GTAATCCAG CACTTTGGGA GGCCAAGGTG GGTGGATCAC CTGAGGTCAG  
G

SEQ ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGTG CTTGCCAGA TCACGTGTA TGATTGCTT GTGGGACGCT CCGTGGATGA GGCTCTGCGG CTGGTCCGAT  
TAAGAAAACC AAGAGAGGCC GGGCAGGTG ACTCAGCCT GTAATCCAG CACTTTGGGA GGCGAGGTG GCGGATCATG  
AGGTCAGGAG ATTGAGACCA TCCTGGCTAA CACAGTAAA CCCGTCCT ACTAAAAATA CAAAAAATT AGCTGGGCAT  
GGTGGCAGC GATTGTAGTC CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTGAAT CCAGGAGGTG GGGGTTTCAA  
TGAGNCCGAG ATCGTACCAC TGCACTCCAG CTTGGGCAA CAGAGTANGA CTTCTAACC CCAACCAAC CCNCCAACCC  
CCCGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

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GAAAAGAAGG AAGGAAAGAG GGGAGGGAGG GAGGAAAGGA GAGAGGGAGG GAAAGAAGGA GAAAATGCTG GAGCAAAGGA  
GGTTGGTTAC ATGATTTCTC TAATGGCAAT GAGCTGCTTT CTGGATGAAA TACAGAATCA GAGCGAGACT CCGTCTC

SEQ ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAATT CCAATAGCTT CACAGTTTAA  
CTGAGGTTTT GGAAAACTT AAGTGAATTC AGCTGATGTT TGAAATATCT GTCTACATTT AATTAGATGT GTTGTATTAA  
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTC AGTAAGAAAA ATAATACCAG GTGATTTCAA  
AAAGGGCAGT GATCTATAAA CACTCAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT  
TAAGCACTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGTA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TTCTTTTGT GGTGAGAACA  
TTTAAAATCC TTCTTTTGT CTATTTTGAA ATATACAGTA CATTGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAAC  
ACCAGNACTT ACCCTCCTG TCTGTGACTT TGTACCTGT TCACCACCCC TCCAATCCTC TAGTAACTAC CATTCTACTC  
TCTACTTCTA TGAGCCTGAC TTTTAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTNGT GGCTGGCTTA  
TTCACTTTA ACATAATGTC CTCTAAAT

SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCTGAG GCTGGGCAGG CAGGGAGCTC TGCCTGCACA ATGATGTAGC  
CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGA GGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT  
GGGGCCACGT CCTTAGAGT GTGTGTGCAC GCACATGTGT GTGTGTGTGT GTGTAATACG CAGGGCAGAA ACACACCATG  
TAGGTACAGC AGGACAGAAA CACATCATGT AGGCCAGCG TGGTGGCTCA GGCCTGTAAT GCCAGCACTT AGGAGGCCA  
AAGTGGGCG ATCACCTGAG GTCAGGAGT CGAGACCAGC CTGGCCAACA TTGCAAAACC TCATCTCTAC TAAAATTCTA  
AAATTAGCCA GCGT

SEQ ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGGT CTGGCTTTAA TGTTAACTG ACGTGGGTCA CTGAACTGT TCAGGCTGAT CTTGAACTCC TAGGCTCAAG  
TGATCCTGCT GCCTTGGCT CCCAAAGTGC TGGAAATTACA GGAATGAGTC ACAGCACCA GCGGCTGTG TTTGTTTTT  
TGTTTTTAC CCCGACAGT NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GCGTAACACA GCTCACTGCA GCCTTGATCT  
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTTCAGAGT AACTGGTACT GCAGGCCAC GGCACCACAC ATGGCTAATT  
TTAAATTC GTAGAGACGA GGTCTTGCCA TGTTTGCTCA GGCTCCAGCT GTTGTATTCT TT

SEQ ID NO:263: (Length of Sequence = 447 Nucleotides)

TGTATCAACT CAGAAATTC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG  
GCCTGTTAGC TTGTGGGCTG CCCAATCCAT CCAACCTTG GCAITGGGAT CAATGTTGAT GAGGACAAGA CCTTCAACAG  
TGTCCGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATTGT AGAGAAATTT  
AGGTACTGCA GGACGCAAGG GATCATGTCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAGGGA ACACAGGGGC  
TCCCTCTCC ATTCCAGGG CATCCACATG GACCGCACA AAGTTCTGAA TGATTCTCTG CATGTCTCG AACTKGAACA  
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)



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TTTTCGCTGT CAACAGACAG TTTATTCTAT ATACAAACAC AATTTTGTAC ACTGCAATTA AATAGAATGG AATGAGOGCT  
 CCTCCGCAIT CCTCCCCGAG TGA CTGGTTT GGCCGCCGCG CACTCCATCC COGAGTGGGA CTGGACCACG GCCTTGGNTG  
 CTGCCACTGA TGTGGNGCC TGCACCCCAC GTCCCTATGC COGAGGCGCA ANTCTGCTCT CCGGGGGACC CCAAGNCTGG  
 NGCACACGCG GGGAGGGGCG GGCCATGGAG AAGGCACTGC AGGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCCGG

SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGGAGTGAT CAGGAACCAT AGTTGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC  
 TGGAAATGGTT AGAAGTGAGG GAGTTTGCCG CGTCTGTCT GTAGAGTCTC ATAGTTGGAC TTCTAGCAT ATATGTGTCC  
 ATTTCTTTAT GCTGTAAAAG CAAGTCTGC AACCAAACCT CCATCAGCCC AATCCCTGAT CCTGATCCC TTCCACCTGC  
 TCTGCTGATG ACCCCCCCAG CTTCACCTCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCCTGCGAAG TGGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTCACGC AGGCAGCTTC  
 CGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTAGTGACT TTGACGGGTC AATGGAAGAA TGACCCAAAG  
 AAGGCTTCAA GGCCAGGCTT GCAGTTCTCC ACCACAAAGG CCTCACTGA TAGCACCAC TCCCCACAC TCAGCTTTNG  
 GGCTAGGTC TGGGTCACCC AGCTAGAAGC CACAGGACCC TGAGGCGTCC GAGGGGT

SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTGTTTTCA TCATGAGCTC GATCAGATGT CTCTGATCT TCAGACTGGT GGTGTCTTAT AATGTCTGT GCACGCAITC  
 TTGAGCTTC CAGGATTCT GTCTGTTCTC TCTGTTATC TACAGAAGAA ACTTCTCTCT TGAGTTCTTG TTCTCTGTAG  
 CGCTTGAAC TCTTTTCTT TTCTGGTTTA CGATCTCTCT CTTTCCATCT ACCCTGTCTG TCTTCTGTGA GGTGCGAGGG  
 ACTAAGAGAA CGAGATTCTT GAGGTCTGAC AACTTGGCTC AAGAGTCTGT GTTTTTTCAT TTNATCAT CTCCACTGTT  
 GTAGGCATCA CTGTCCGAG AATGTTACG CCGGCGCTTT CCGGGGACTG TCTAGGGCTG GGACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGTT ACCTCTTTGG AGAGAACATG GATCTGAACT TCCTGGGCAG CGCCCCGTC CAGTTTCCCT ACGTCACTCC  
 TGCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCA AGACTCCCTG CGGCTGGTGA GGTACAAAGA  
 CGATGCCGAC AGCCCCACCG AGGACGGCGA CAAGCCCCGG GTGCTCTACA GCCTGGAGTT CACCTTCGAC GCGATGCCC  
 GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGCG AGGGCAGTAT ACAGCCCCAA GAGCCCCC

SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGTCTAT TCAGGTCTTT TGCCCAITTT GAAATAGCAT TGCTTGTTCT TTGCTGGAT ATTAACCCCT TGTAGGTGC  
 ACAGTTTGA AGTTACCTTT TCTCATCTA TAGGTTATCT CCTCACTCTT GATTGTTCT GTTGCTGTGC AGTAGCTTTT  
 AAGTTTGGTG TAATACCAIT GTGTTTCTC TGCTGCCCTT TTAAGTTTCA CTGGGTCAA AGTTTAAAT TTGTGAATTC  
 CTATATTTT AGGGCAATTC TCCTGCCACT GTTGAATTA TGCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT  
 CTGTACCAAT GGAGATGATG CTGGATGGTC TCTATCATAA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGGC  
 TCTATATCAT GGATCTCCAT TT

SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAGC CCAGACCTAG GGGAGTATGA TCCACTTACC CAGGCTGACA GTGATGAGAG CGAAGACGAT CTGGTGCTTA  
 ACCTGCAGAA GAATGGAGGG GTCAAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TGCTGAGGTT  
 GCAGAGGCTG CAAAGCACAT CTTCAGAAAG TCACCACGGA GGGCTACCCC TCAGAACCCC TTNGGGGCTT GGAACAGAAG

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GCGGCTCTCT CCTGGTGTCT ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC  
TGTGTGCTTT CCTGATCCCC TGTCCTCCA GAGATCTTGA CAGAACTGGA GCCGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGTTACAGTT CCTTTCTTT GTCCTTCTT TTCTATCTT TATCTATACT TCGACTCCTC TCCTTTTTC TCCTTTGTTT  
TTTAGCCTCA CCTTATGCT TATGACTGTA CCCACTAAGA TTTCACGTT GATCATCAAT TTTACGNTA TCTCGACTCC  
TACTGCGACT GGCACGATTG GTTCGTCTAT CCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGGNCAC  
CAAAATGTTT ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGAA ATTTGAAGTG TATGTTGCTA TCAGATCAAG  
TGCAGGAGAG GTATAAGGCT ACTGGA

SEQ ID NO:272: (Length of Sequence = 394 Nucleotides)

GTGTTGTGTT TTGAGTCGGA GTCTCGCACT GTGCCTGGG CTGGAGTGCA ATGGTGCAAT CTGGCTCAC TGTAACCTCC  
GCCTCCCAGG TTCAAGCCAT TCTCTTGCTT CAGCCTCTTA GTAGCTGGGA TTACAGGCAC CTGCCAGCAC ACCTGGCTAA  
TTTTTTATAT TTINAGTACA GACAGGGTTT CACTATGTTG GCCAGGCTGG NCTTGAATC CTGACCTTGT GATCTGCCCA  
CCTCAGCCIN CCAAAGTTT TCAGAAATTT TTAAGGAAAC ACTTTTAACC CTTAAGGCTT TCTTTCAAAC TCAGATCCCC  
TTACACAATT GATCAGACGT GGCAAAGTTT TGCTTCAAAG TTTTGGACT GGGTTTCAC TTAGGCTTA CTGA

SEQ ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCTGTAC CCAGGCTGCG AGAACGTRAG TTTRAGGAGC CGCAGCATGA TGTCGAGCC GGGTCTTACC AAAGRATGC  
TGGAGGTGTT TKTGGCCCCG ACCCACCACC CGCACTGCTC GGCGATGAC CAGTCCACCA AGGSCATCGA CATCCAGAAC  
GCTTATTIRA ATGGAGTTGG CGATTTCAGC GTGTGGGAGT TCTCTGGAAA TCTGTGTAT TCTGTGTW ATTRACTATT  
TGCTGCAAAT AATCCACG

SEQ ID NO:274: (Length of Sequence = 348 Nucleotides)

TCCCAGTTGT CCCGATTGTA ACTCAAAGGG TGAATATCA AGGTGTTTTT TTTCATTCCA TGIGCCCACT TAATCTTGCT  
TTCTTTGTTT GGCTGGGATA GAGGGGTCAA GTTATTAAAT TCTTCACACC TACCCTCCTT TTTTCCCTA TCACTGAAGC  
TTTTTAGTGC ATTAGTGGG AGGAGGGTGG GGAGACATAA CCACTGCTTC CATTTAATGG GGTGCACCTG TCCATAGGC  
GTAGTATCCG GACAGAGCAC GTTTCAGAA GGGGGACTCT TCTTCCAGT AGCTGAAAGG GGAAGACCT GACGTACTCT  
GGGTTAGGTT AGGACTTGCC CTCGTGGT

SEQ ID NO:275: (Length of Sequence = 396 Nucleotides)

GTITGGTGAA TTGGTCTGT GATAAAATG GAGTTCAAGA AACAAACAGG AACTACAAG TGCCCTTCG CCCCAGGTC  
ACCCGAGTGG CAGGGCAGTG ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCCTGTCG GAATGCTCCT CCTCCAGTC  
CCTCGCTCC TGTGTCCAG CCACATGCAC CTTCCTCTA CCTCTGGGAT CCTGCACCA GGTCTGCCCC TGTCTTCTCA  
GGGCTGCTCC TTTTGGNCCA CAGGACCTCA GCTGGAATGT TGCTCTCTCC AAGAGGCCTT CTGACTATT CAGCTCACAG  
TGGCCACCA GCCACAATCT GCCATGTGCT TTGGGGGATT GTCTGTTAAC TGGCAACATA CTGGCAGCCC ATAAT

SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTGGGG AGGCTGCGCA AGGGGGCGAG CCCGGGCAGC CGGCGCAACC CCCGNCAG CCGCACCCAC CGCGCCCCA  
GCAGCAGCAC AAGGAAGAGA TGGCGGCCGA GGCTGGGGAA GCGGTGGCGT CCCCATGGA CGACGGGTTT NTGAGCCTGG  
ACTCGCCCTC CTATGTCCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCGGTGTC CGCAGAATGA TGGCCCCAAT

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CCCGTGGTCC AGATCAITTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCOGAGC TGGTCTGCA GCGTTGATGA  
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEQ ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATACGAC AGGGCTGGCG CCOGAGTAAT TCAAGCCCTT CGGAAGTGTG ACCGGCTGCC AGGCCTCGGA TGCAATCCTG  
GAGGCGGGAG ATTGCGCCIN AAGACTGGCT CGAGCCGCCC AGGGGCTCCA TGGGAGACTA ACGCGGAAGT YCCAGCCGTC  
CCAGTGCCGT GACGTCCCCC CTTGGTGGGG CCTGCACCCG ACTACT

SEQ ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGTAATC CCNGCACTTT GGGAGGCTGA GGTGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG  
TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCCAG CTACTCGGGA  
GGCTGAGGCA GGAGAATGGC GGGAAACCCG GAGGCGGANT TGCAGTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA  
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GTGTCTGGGC TCAGGGTGG CCAGCTTGCA GAGGAGCAAG CTAGTAGAAA TATTGCAGGG TTCCCAAAAC CAGGTCAAGC  
AAGATGCCAT GTCACCCCTG AGCATGCCGT TCTTCCGAGG GGTGTACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGNAC  
TTGTATAAAT CACATGGGTA TGTTCTTGGT TCAGTGATCT TGGAGTGATG ATGGTAACIN ATGAACAGAG AACTTTYYAG  
AACTTKGGTC CTGTCTTCT CCCTGAACCT AGACAAGTTT CACCCCTCCT CCTGTACCCA ACCCCATT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTTTAGCAG CTTTCTTGAA ATTTAAATA TATGTGTAAG TATCTCATTT ATATGCATTT CTAGTTTCTT TATACAACAG  
AATAACTTCT TTTACATCAA ATTTCTGAAT TTGACTAAAT TTAGAAATAA TGGAATCTCA TCCATTAAAT ATAGTCATAG  
AAGGAAGGAA ATATGAAAAT TAGGATTTCA GATGTTTGAA CATAAAGAT AATTTTAAAC ATTGTGAGTA ATCTATTTCT  
TTTTTTTTTC GAGACGGAGT TTTGCTCTGT CACCCAGGCT GGAGTGCACT GCGCGGTCT TGGCTTACTG CACCCTCTGC  
CTCCAGTTC AAGTGGATTC TCCTGCCTCG NCCTCTGAG TAGCTGGGGT TACAGGGGCA TGCCAACATG CCGGGGCTAA  
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAAATCCGT CTTAAAAAGA AAAAAAGAAA ATTTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA  
CTGAGAAGGT GGCATTTGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTC AGGCAGCCAC CCTTCCCAGC GGCCACCATG  
ACGGTGTCTT CATTTGCTTTA ACCATTAGTA ATCAITTCATT CATTTCATTCA TTTATCCGAC GTCAGCTGGA GGNCTGCCC  
GNGGGGCATG CGCTTAGATT TNGGAGGCCT TCCGGGATGC TTGCGCTCCA ACGGGGAAG GCCGACTTGG GCT

SEQ ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCTTGGCCT CCCAAGTGC TAGTATTATG GCGTGAACC ACCATGNCCA GCGAAAAGC  
TTTTGAGGGG CTGACTTCAA ATCCATGTAG GGAAGTAAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTTCTAA  
CANATGGCTA TAAINTAAGG GGTITAGGGT CCTTTTTTTT TTTTCAGGGA TACATT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGCGC TTTACTCCTG GTCCCATGGC GTAAAGATGT GGCTGGGCCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG  
GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCAGAATT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA

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GCCCCCTGTC CCAGACACAG GCACCCCCAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCCTCCCGG GCCTGGGCCT  
GTCAAGTCTG CCTGCAGGAC CCTGCCATTG TGCTCAAATC ACAACCATTT TTTGCTTCCA ACATTTTAGG GTGCTTGTGC  
AGTGAGT

SEQ ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GTAAATTGTT ACAAACTTAC TTTAGAGCAA ATTTAGTCAT CCTTCAAAAA TTAAATGTA TACTTATTTT  
CTAAGAATTC GTTTGGCTCA CACAATTGTG AAAAGATAGA TGTACACCAG TGTTCATTAC AACAAATTATG CAACAAATCT  
ATTATGTGCC AGACATTATT CGGAACCTG GGAATACATA AGTGAACAAA GCAGATTCCT GATCTCAGGA CCTGGGGTCA  
GGGGTCAGGA GAAGCCAAAA AACACGCTNG AGAAATACTT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT  
GGNGATGTGA AATCTTGTGT

SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTACAG GAGGTGGGTT CGACCTCCGG TTCCCCACC ATGACAATGA GCTGGCACAG TCGGAGGCCT ACTTTGAAAA  
CGACTGCTGG GTGAGGTACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAAACT  
TCATCACCAT TAAAGATGCC TTGAAAAAGC ACTCAGCAG GCAGTTGCGG CTGGCCTTCC TCATGCACCTG GTGGAAGGAC  
ACCCTGGACT ACTCCAGCAA CACCATGGAG TCAGCGCTTC AATATGAGAA GTTCTTGAAT GAGTTTTTCT TTAAATGTGA  
AAGATATCCT TCGCG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAATTAT TAAAAAGAGG CCACITAAAT TCACTCTCC ATGGATACAG TGTCTGTGGC AATGTTTAAAT TAGAGATTAA  
AATTGAGGAA TTGAATAATT GAGGTGCTA ATGAATTTGA AACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTTCCGACT  
TAGCTTTTCT TTCTTAACC CTTTCTCAT TTCTACTAT TATCACAINT CTGGCCTTGA CTGCTGAGTT TATTACTACC  
CATAACCTG GCCTAAGTGG AAACAAAAA GCTGTAGCCT CTTTGTGTAG CTCTGGAGA CATTTGGTCT ATTGGATTTA  
TGACATGTTT AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAAATG AGATATGNTG GGCCACCACG CTTTCTGT

SEQ ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCACT GGACAAAATG AGGAAAACAG GTGAACAAGC TTTTCTGTA TTTACATACA AAGTCAGATC  
AGTTATGGGA CAATAGTATT GAATAGATTT CAGCTTTATG CTGGAGTAAC TGGCATGTGA GCAAACTGTG TTGGCGTGGG  
GGTGGAGGGG TGAGGTGGGC GCTAAGCTTT TTTTAAGATT TTNCAGGTAC CCCTCACTAA AGGCACCGAA GCTTAAAGTA  
GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGGCCT GATCCTTTCC CTGTTCCCTG TGTATTCCCT GTCTGTGGCA  
AAGCCCATG CCTTGATTCT CTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTTCTGC AGTTTATTTA ATTTACTGGC  
AAAATGACGT ATTTTTTTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG  
TTTTCAAGAA ATGACTGATA TAAATCATGT GTTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT  
GTTCAAATTC TGTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAGTTGC ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTTTATTTG GTAAACTCA GAACTAACA ATTCACATCC TCCCACCTTC TTCTTTCCGA AGAAGGCAGT  
TTGCAGAGAC AAAAGGGCTG TGGCGTGGGG ATCATCCACC ATCTCCAGGT TTTACACCCA GGCTACCCAT GGCTTGGCAG  
TCAGGCTCT AGGCTGATTG CTCTCAGAGG CAATAGAA

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SEQ ID NO:290: (Length of Sequence = 353 Nucleotides)

GGTTTTCATC TTGGGTTTAC AAAAGTCCTA CTATTTATTT ATTTTAACTT TAATTTAAAT ATCACCTACC TTAGGTAGAA  
 GTTTTCCTTT GTGTAATATA ATATAAAACC GACATTTCCT GGGGGCATAA TAGTAAAGAT GTTAACATTT TTGGTTCCTT  
 TTGGATGCT GTATTGTGTC TTCTTCGAA AGTGATGTGT GCCAAGATGG CTCATGTAAAC CCAGTTTGA CTAGGCTATT  
 GATATTCTGT CTGGTTAATT TATTGAACTG GCTTAAAGCT ATACATATTT CCTTTAGNTGTAA GATATTCTAG  
 ATATATTGGT CTACTGATTC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CTGCTACACA GTCTTGCAAC GNCCTCGTG CTGGGCTTC TGCGGTGAGG CAGGGGAGTC TGCTTGTCTT  
 AGATGTTGGT GGTGCACTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT  
 GAG

SEQ ID NO:292: (Length of Sequence = 397 Nucleotides)

ACGGGAAGGT GAGTATGTNA GTATGINTGC CAGACAATGG TGTTCCTATG TCAATGGAGG TTTCTCAGAG AGAGGTGATC  
 TGGCTGGAGA AAGCTTAATC TGGTGGCAAT GGACAGGTGA CTTTAAGAAG TGGGGAACGA GGAAGGAGG CCAGTTTGAA  
 AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACA GAGCAGCTGC AGGTAGAAGA TGGAGACAGA  
 ACTNGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTACAA  
 AAGCCAGGGG NAACCTAAAG AGAAAACACT TAGAATTTTN GGAGANAGG CTAGGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGTAAAT TTACATACAG TGAAATCAA ATCTTAAGTG TACCACTAGA TAAATTTTGA TAAATGCATT ATGCCTGGTC  
 TTCACACACC CTTTCAATA TATAGAAAAT NTCCAGATAA TTTATTTTGT TGTTTTTTC ACACACTAAG TTCTAGACTT  
 TTCCAGGTCC GAGGGAAC TAAGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG  
 CAGAAACACA TCGCAGATTT AAGGTCGCA ATCTCTGCTT TTGTATTG TTCCAGTTTT GATCTCAGTG ACATTACAAG  
 CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEQ ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTTCAG GNTTCAACCG TTTTATGGG AGGTTTGT TTCTGTGAAA TACACTAGAG GGTGGGGAAG GGGACACATT  
 CACTTTGCAA GATAAGGGTT TCCCACCACT AAAGGAAAGG CATGGGGCAG GGCACACTGG GGTTTGGGTC CGTTTTCCCA  
 CCTCCTCTG CTGGCTCAC TTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAA CAGCAAATCA  
 ACCTCCAACG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGCTGGGG CAGCTCACTC  
 G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCCTCCGGCC CGGCACAGGG GGCATGTCCA GAGGTGCTGT GTGTACCAA CTGGTCTTCT AATTGGAAG  
 GAGTTGGAAA GGCCTTTTGT TTGATGAAA GTTGGAAACA GTGGCACATA TCTNAGAGGG AGGAACGAGG CAGCGTGGTG  
 AAGCG

SEQ ID NO:296: (Length of Sequence = 315 Nucleotides)

CGAATACAGG TAGTGCCAG CTGGTTGGGC TGGCCAGGA AAATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC  
 ACAGCTAAGG CTGTGTGGA GCCCATTCAG AGCACCAGTC TAATTGGGAC TTAAACCAGG ACATCTGACA GTGAGGTTCC

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AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAAC TACGTCTCAG TTGCAGCTGG  
CTGACAGTAA GTCAGTGCAT TTTTATGCCG AGTGCCGAGC ACTGTCTAAA AGACTNGCCT TGGCTGNAAA GTCTA

SEQ ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCTNAAGC TTGATNATOG RATGCCAAT CTNCATATTT GIGTTAGAAT CATTGTGTTT TGIGTCTTCA  
TGTTTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGTAACITAA ATGTATTAA GCAATAAATG  
TAATTTTCCA CTNAAAACCTA TCATTATAGA TTIGGTTACT ACCTACTGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC  
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTACACA CAAGTGATTT TGAACACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT  
ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAT GAAAATTATA AAAGTATCAN GA

SEQ ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGTTTTT AATGTCATCA CACGTTGTCT CAAAATGAGT GGTGGCATCA TATGTGCGGG AAATAAGAT CTGGCTTTCT  
GTTCCCAAGT CTTTGGTAC CAGGAGGTCA CTGATGCTAA CAAATTTCTG TTCAATTGGT TCCAAGAGCT CCAAAGCTGG  
TCTGATTTCC TTCTCAGGCT CCTGGTTTC CACAGTTGTA CTAACATAG CAATGTACTT CCCTGTGCT GCTACATTGT  
GGCAAAGGA GATCATGCAG ACGTAGATAT CTGACTTTG ATTGACTTTG GTTCTGTGGA ATAATGATCT GGCAGGAGTT  
GGCATCATG GTGTCTTTG ATGGGGTGG CTGAGGGATG CAAATAACCT CTG

SEQ ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT  
GGCTTCTGCTG TGAATCCGGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCA  
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTTGCATGCC ATGAAGAAGC TGGCCAGCT CATCAACGAG CGGAAGGGTA  
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG  
CTCAGAACTC ATCTACTCGG GGGGAGCTGA CCTCGGGTTA CACAG

SEQ ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATTCAAA CAAATAGCCT GAGAATTTNG GGGGATCTG AAATAGAGTA CTATGCTATG TTGGCTAAAA CTGGTGTCCA  
TCACTACAGT GGCAATANTA TTGAAGTGG CACAGCATGC GGAAATACT ACAGAGTGTG CACACTGGCT ATCATTGATC  
CAGGTGACTC TGACATCAIT AGAAGCATGC CAGANCAGAC TGGTGAAAAG TAAACCTTTT CACG

SEQ ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTTTCACTC TTGTTGCCCA GGCTGGAGTG CAATGGCGTG ATCTCGGCTC ASTGCAATCK GCACCTTCCG GKTTCAGCG  
AFTCTCTGCT CTACGCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCGGC CAATTTTKTA TTTTCTGTAC  
ACACAGGGTT TCTCCATGTT GGTGAGGCTG GTCTCAAACCT CCCAACCTCG GTGATCCGTC CACCTGGGCC TCTCAAAGTG  
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAAITTTA ATGCTTCTTT CAAGNCTATT AGAAACCTTT  
AATGCTTCT TAAGTTTCTC CCCCAACTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA ACAAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA  
AACCAACAAR RRTCAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

CCTAAATATA TATGCACCCA ATACAGGAGC AACTAGATTC ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG  
CTCCACACA TTA

SEQ ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTGAG ATGGAGTACT CGCTCTCTTG CCGGGGCTGG AGTGCCAGTGG CGCGATCTGG GCTCACCTGC AACCCCTGCC  
TCCCCAGTTC AAGAGGTTCT CCTGCCCTCAG CCTCCCGGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCCT  
TCTTGTAATT TTAGTGGAGA CGTGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG  
CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CGTGCCAGG CTGTTTTTAA ACTGACITTG GATTTTACTC  
CCTTTCTATG CAAATTTAAT TTAGAATCTG TTCTTTAACC TTAGGGGGTT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG  
TGKAAATTC TTAAGG

SEQ ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTTTGTG ATTTTATAGT GAGACGGGGT TTCACCATGT TGGCTTGGCT GGTACGAAAC TCCTGGCCTT  
GAGTGATCCC CTGCCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GTCAGCGTGC CCAGCCGAGA TTTTATTGTT  
TTAATTACAA ATTTTACGTT AACTGATTCT GCACATTTAT ATTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTGGCCAC ATTGGCCAGG CTGGTCTCGA ACTCCCGACC VGTGAGCCA CCTGCCCTGG CCTCTCAAAG TGCTGGGATT  
ACAGGCGTGA GCACCCGCC CGACCCATAG CTCTTTACAA CTGCCTTGTA AAGAAAGCAT CATTGGGCAC TGTTAGTATT  
TCTCTTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTTGGTAC AGAGTATGTC AGGAAGACAA CTCAGATTGC CATTTTAAAT AAAGTTGTAC ATGAACAATA ATTGGAATCA  
TCAGGTAATT TTTTAAACA AAGGTTCTTC ATTTACTGTT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGTSCCATA  
GGCTAATTAA AAAATAAAAC CTGGCCCGG CGGGTGGCT TACGCCTATA ATCCAGCAC TTTGGGAGGC CGAGACGGGC  
AGATCAAGNG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGGTGAAACC CCATCTGTAC TTG

SEQ ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATGCCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK  
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAA CATACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCTCA TAANCCCCAC TGGGGAGTCT GGGGGCTCT ATTGCCATGT GCCTGGAAATN ATNATATGCT CATCACTTTA  
TGAAGAATAA AATTTGTTTT TCCTGCCCTTA AAGTTACATT CGTTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT  
GTCGCAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCCTGTACC ACCTCTTCCT GAATACGGAG GAAAAGTTGG TTATGGACTG ATCCCTGAGG AATTCCTTCCA GTTCTTTTAT  
CCTAAACTG GGTAAACAGG ACCCTATGTA CTCGGAAGTGG GGCCTATCTT GTACGCTTTA TCCAAAGAAA TATATGTGAT  
TAGCGCAGAG ACCTTCACAT CCCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAAGAA ATATGGTCCC TTTGTTCGAG  
ACTTTGCTGA TAACTCAAT GAGCAAAAAC TTGCCCAACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

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TGCAATTGGA TACGGAGAAG GTCACAACAG GCACITGGTTT CCAGGAAGCG CCATTITACCG TTTTITMATGG GMCAAAGGGA  
GTTACATTGG CTATGGCTTT TGGGAG

SEQ ID NO:311: (Length of Sequence = 489 Nucleotides)

TGCACTCGGT CCTGGATGIG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG  
GGGGGCGGCA CGGGGTCCGG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC  
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CCTMTGGGTC CACCAGCTGG  
TGGAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCCGTGA GCTGACCACC  
CCCACCTACG GGGACCTCAA CCACCTGGTG TGGGCCACCA TGAGCGGGGT AACACCTGCT TGGCGTTYCC GGGCCAGCTG  
AACGAGACCT GGCAAAGTGG CGGTGACAT GGTGCCTTTC CTGGCTGAAT TTTTATGCC CGGTTTGGGC OCTACGAGCC  
GGGGAAGCA

SEQ ID NO:313: (Length of Sequence = 302 Nucleotides)

CTTCTCATGC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC  
GGTGTCCAAC TGCTAAGATT TATTTCCAAC TTGTGAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAGGCT  
GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTCAGAGGC AACCATATAC ACACAAATAA  
TGTAACACT AAATTCATG AAGTAGCTGT CCAGGGAATA CTTTCCAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATGTGAA AAATAATGAA TATTAATTTG GAGCATAATA TTAAATACA TGAAAAAGC TGGCTGGGAA  
ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTTTTGAGAG NGCACTCTGA GTGTAAGTTT ACTAGACTGA  
CATTACTAAA ATCATTTGGT CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCCTAAAA  
CTCCTCTTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGGATTA ACAGTGTACA CCACATGTGC  
GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAGTGGTG GTGCTGTCTT GGATGCTTCC AGTGGGCCCC GACCAGGTCT GGACAATGCC TGGGGCCCGT CCCCCGCCCC  
TCTCTACAC ACACGCAAGA NITCGGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG  
GAATGAAAAG GGAAAAGTGA GGAACGGGA GCCAAACCCA GGAAGACGCC TCTTTTCTCG CACATTCCTT CTCCTTTATA  
TACTCAGCTC TTGGCTGTCT CCAATATGTA CCCACCTGG TCTTCCAAGC TGGGAGCCAC TTTTATAAC ACAATCACAG  
TTTCACAAAC CCCAGGAAG TTCCATGTGG NGAGAGGTTA AGTTTCGNCC TTGTCCGGGG AATTATGACA CTCAGAATAT  
CCCCCTTGGT GTAAATGGAA GACAACCTTT

SEQ ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCCTG GAGGGCAGNC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGCGTGAGAG  
ATCTGAGGCA TCTCGGGGCG AGGGGAGGGC TGGGAAGGCA GGCTGGCTNG GACCTTCGCA TCTTAACCTA ACCTTGACCC  
TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGCTCAC  
CCAAAAACAG AAGAGTGAGG CTTCCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCG

SEQ ID NO:318: (Length of Sequence = 407 Nucleotides)

CTGCCCCCGC ACCTTCCCCG CCTATGCCCC TCGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCGG GCCACGGGAC  
CCTCAACTTC TCCAGCCGCT CCACCCACGC TTCTGGACC GCCTCTGCA GCGGAGGCTC ACATCCAGCA CTGTCCCTTA



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CAGTCGCCAT GCCCTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTTCCTCAT AGGGTGCATG  
 TGCCAGINTT GATAAAGTGC TGGCCACAGG CCCTGCCTTC CCAGGGCTCA CAACACTGTG TCCCTGACAC ACCCGTGGGC  
 TGTAGTGATT CTNTTCATGG GGATTGACT ATAACNGCA GTCAGGAATG AATTTCACAN CATAGCTCAG TACATACACA  
 CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTTGG GGACAGGACA TGACTAAGCA CAGAGCTTTC TTCTTTTGAG GCCACGCATG TGGTGCAGAG  
 CGGGACCACC TGCAATCCACA CAGCCCGGCG CACCTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC  
 TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTTCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT  
 TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCCAGGCC CAGGTGACAC CTNTCCCTG CTGNCCTGT ACTGNCCTGCC  
 TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEQ ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCCGGGCG ATGGACAGCC CCCGGGGTGN CCGCCCGCNC CCCCTCGCC GCGTCGCGTG CNGTTCACCA GGCAGCACCT  
 GGACAGCTCC AGAGTCGGGG AAGCGCCATG GTTCTGCGC AGAAAGGATG CCGGTTGGGG CCGGCAGATC CTGCCAGGAC  
 TAGGGGCCCTT CCCTTTCCAT CAGGAGCCTG CAAGAGAAAC AAGAAAACAT TAGAGGGGCT TCTGTGTAGG GGGAGGGCAA  
 GTTGAGTCTA TCTTCTCTT TGTAGGTACT AATTAAACAC CTGCTGINTG CCTGGTACTN TGCAGGGTGG GACAGGCATC  
 ATAGCAACTC ACAGTGGTCC CCTCTCTTT GTGCCATAG TCTAGTAG

SEQ ID NO:321: (Length of Sequence = 355 Nucleotides)

GGTGGACTGT GCTGTGAAC TGAGCTGAAC TGGGATCAGG AGAAGGAGAA GTGGGGATG AGCCCTCAC CTCCACACAC  
 TCTCTCTGT GCTGAAATT CTTCCATTAA GCAGCATGCG TGTCCCTGT AAACACCCAC ATTAAGCCAT TAITCATCTT  
 ATGGCTTINAG TAGCGGTTAG TCCCTCAGAT CCTTCTCTGC TGAAGCGGA TCTGATAGA GAGAAGGGAA GAGAGATGGA  
 TGGTCTGGG GACGGCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGTCTC TCGGACTCTN GGGNAAGAAA TATTTCTGG  
 GGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCCAGGCAG CTCCATCTTT CCAATCCANT CCCATTATCC CAATCTCTAC  
 CCCAGGATCC CCCAACTCC TCCCACTTCA CCTCTGCCAC AGACCCGCTC GCCCCCAAAC TTCAGCCTNC CCTCATCTGC  
 CCTNACCACC CACAGCCCTT CCTACCTAGC CCTCTCCCGC GACGGGCCCG CGGGCTCCCC ACATT

SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTCGCTCC TGTCCGTGAC CTTCAGATG CAGGTGACAG CCTGCCCTTC CGTTTTTNTC TTTCAGTCC CGCCTGCCGG  
 AITGGGTTCC AGCCCTGCC ACACGCCCGG TACATCCCGC CTACACTCAC CGATGTGCC TAGCAACCCG GCTCGCCGCC  
 AGCATCCGA ACCGAGGTCC CCGCGCTCCA GTTCTCTGNN GGGGAGGGAG AGGGGTGTTG CTTCCTCAGC CCCCTGCAGC  
 CTGGTGTCTT

SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GINTTCTTAT GCGGATAAAA TTTCTNAGGT AAGAAAAGTT AGCTCTGAGC AGCCCTCCGC CTGATACTAA TACTTTACCA  
 ATGGAGATT TCTTTTCTT TTCTGTTTT GAGACAGGGT CTCACTTGT TTCCAGGCT GGAGTGCAGT GGTGCCATCA  
 TGGATCACTG CAGCCTCCAT TTCCCTGGCT CAAGCCATCC TCCACCTCA GCCTCCGAG TAGCTGGGAC TACAAGGTGT

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GCACCAACAC GACTGGCTAA TTTTAAATTT TTTNNTAGAG ACGGGGGTTT CCCTATGTTG CCCAGGCTGG CTTGAATTCC  
TGGGCTTCAA GTGATCCT

SEQ ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTCCAGACT CCTCCAGCTG TCATGGATCC TGGGCCAGGG GATCCCGNAC TCACCCAAAG TGGGGCTTTG GGCGGTGGTG  
GGCGGGTTCA GTGGTGGAGC GTCTTTTGT CCAGCTCAGA ACCTGCTGCC GGTCCGGTCC CAGAAAAGTT TCTAGCGGGT  
GTAGTTGCCA AAATTAGGGT CTGTNACTGC TGGGCTGGCG GTGGGCGCCT CATCCAGCC TTGGAAATCC TTGCCTAGTA  
GCGGGAAGTT CTAACACGCA AAGGATACAA GGCCOCTTGA GCGCAAGTAA ATTTCCCCTC TTGCAGCAAC AGGTGTCTTC  
CAACCAAGC AGCGTCCAGC TGTGTNCGT GGCTGGAGTT CTGCACTNGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC  
CGCTTGAGAC CCAGAGGCAG TTTGGGGGAG AGGCTTGGG CTCAGAGGCC TTTCTTTGTT T

SEQ ID NO:326: (Length of Sequence = 391 Nucleotides)

GGCCCTCCAG TGTCTGCAG AGAGGCACTC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACTTT  
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCAG ATAAGTACC CCTCAAAAGC  
CCCCAGGACG GCAAAATCAA AGGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAACTTT GCGCTACTCC  
CACTGCCCTG AAGCAGCCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTTA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT  
TGCTAATCAG TAACAAATA TCCCTCTAAA CCCAGTCTG CCTTGAACCC ACAGGCTCAG GATGGTAAAT A

SEQ ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCTGGG GATTCACAGC CGAGACGTTT CTGCTCCATT CCGGCAGGAG CTACCTTCCC GAGCCCGGCT  
TTGCTCACCT GTAGGAGG TAGAGGGAAA TAAGACAGCC CTTCTTAGGA TGGTGGAGTG GCTAGAAAGA AGCAATCCAC  
GCCAAAGGCT TAGCTCAGTT CCTAGACTTA GTAAATGCTC AATAAATGTC TGCCATTGTT ATTATTATTT ATNATGCTTC  
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGAGAC CTCGGTTAAA TCTCTAGGCG CATCTTTATT  
TTTAGGATGG AGTAACTTGC TCAGGACCTA CATCTAACAT TGTGGAGGGG ATGCGGTTT TAAGTAGGAA TTCTTNGACT  
AGACCTCTCA GCAACCTTTT CCTTCCGTC ACAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCCTAGAAG TCTCCCATTA TGGTGCTGTG TCTGCTGGGA CCCACGGGGC GCTGCACAGG GAACCATGTG  
GCGGTGAACC TCAAGTCCNG NCCAGCAGGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCCTTT  
ATAGATCATC CATTAAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAATATTA GCCCAGCTAC CCTGCTGGGC  
TGTCTTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAAGAT  
TTGAACTCAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCTCCT CTANTGGGTC TGCTTCCCTA CCGGCCCTGG

SEQ ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGGT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGGG  
GCGGGTAGGG GTGGGTATG TTCTTTGGCT TGGGGGAGT TACAAGGGTA CAGTGGGGCT TGTGAAGGG CAAAAGTTCT  
GTAAGTNCGT CCCNACAGGC CAAAGAAACC CCAGAGCCGT CTTTCGACTG ACTACAGCCT GGAAGAG

SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGTTT AGAGGGACAA CAAAGGCAGT TAGACTGTCC TGAACGTTCC TGCTCAGGC TGAAATTTT  
GTAGCACTTG ATCAGTTGCA AAGTATCTT CCTTTAATA TCTCATTTTA TCATTGGGTA TCTGAAGAGG AAGTGGAAAT  
GGGGTAAGAA TTTAGGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCTTA AAGAAAACCT

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TAAGGATTTT AAGGAGAGTC AAACCTCTACA TTCAATCCAGG CAAACATCTA CTCTTCCATT GATTAATGNN TCCACTCATC  
CGTGCACAC ATTCACTCTT TCATCCATCC ATTCAATCAT CTATCCINCA TCAATCCATC CATGTATCTT TCATTCATCC  
A

SEQ ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCAACGTTG CCCCGCCTTT GTCTCCAGCG GACTGGAAAG AACCACCAT TGTGAAGCAC AGAAAATTGC CCGCACTCTT  
ATTGGCTAGG TTCCCCGACT TCCGCTCTCG GTTGGTGGTT GGCTTTGCCT GTTACCTGIG TTGCCACTA CCACTGCTC  
CGCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCCGGT GTTCCGGAGC GCTGCGGGCA AAGCAGACCG CCTTGGCCCT  
ATTATGGGTT GAGTGGCTCT GTACTCTAGA TCGGCTCTGT CACTTACTAA TGGGCCGTGT TGCTTCGCG ACTGCAGGTT  
TT

SEQ ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCTGCACTC TTGCACTCTG GCCTTCTCCC AGGCTGAGCT TTATCATATC ATCAGCAGCA ACCTGGAGAA  
AATTGTCAAC CCAAGGGTG AAGAAAAGCC ATCTATGTAC TGAACCGGG ACTAGAAGGA AAATAAATGA TCTATATGTT  
GTGTGGATT CTTCTGGCG TGTGTCATTC ATTCAAAAG CATTATTTGA GTGGCACCTA TGTCCAGCCT GAAGATGAAT  
GTGGTGGGAA GGGGTGGGTG TCACAAAGAC AAAGATGACT TAGATGCCCA CTGTAATCTT GACTGTGAGA AAGAGGGGAT  
TCAGGCCCTT TCTCATCCAG TAGTCAATGT GCCATCTCCC CTTCCTAGT CACCTCTTAT CTTCACTTAC CTTCTTTCTT  
CTCCTGCTTA TCTGTTTCC ATCTAAGGCA AAAAGGGGG G

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCGTAG ACCGAGTAGC TTGAGCGCCT CTTCGGTTA CCTTTTCCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCTC  
GCTCAGGCAC AGAGNCCGA CACGAGCGG CGGCTTCCCC GGGATCGAGG GACGCGCAG CCAGAGGAGA CGAAAGGAAC  
CCGGGTCCGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGGCCCTAG TGAGINTGGA TTTCGCGGGG TTCCGGGGTT  
CCGACGGCGA CCTCGGCGAC CCTCACTCA CCGCTTCTC TTTCNCAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG  
TNGTTCGAGT TCCTAAGTAA GTCCCCAGGC CCAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCCGCTCC GCACCGCCT TTCCCGAGCA GGCTACACCT CTCCTGGCG CATCTTACT GGAAAGCCGG CAGNGGNG  
GGAGAAGTGA GCNCCGTCTC CGCGCTCCT CGGTCTGCT GGCTGAGCG GGGGATGGCT CCGGAGGGAG AACTCAGGA  
AACCACCTCC GCCCTTCCCC CATCTTATC CAGCG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TCCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCGCCTGC TGGGGGCCCC TGGNAATNTA  
AGTCTGCCC CGGGCTGTG CGCCTCTC CTGANAGCC CCTGCTTCC TGGGCACAGG GAAGCCTCCA TAGGCTAGTA  
GCATCACAGT GCCAGGCCCA GAGCTTACTG GACTTCCCAA GGTCTTATG GACTAGGGCT GAGGGTACAC ATCTGCTTT  
TTTCCAGAAT ATAAGTTTG G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

CGGAAAGCG CTTCCGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGNCCG GACTCGAAG GCCCACCNGA GNOGGACTAA  
GTCGTCCAAG GAGCCGCTT CGGCCTACAA GGAACGNCC AAGGCCTACC GGGAGGACAA GACCAGCCT AAGGCCTACA  
GGCGGCGCG GTCCNTCAGC CCACTGGGAG G

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SEQ ID NO:337: (Length of Sequence = 279 Nucleotides)

CCTTAGGGCT CCTCCTGACT CCTTCCAACCT CCCAAGTCTG CAGCCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTTC  
 AGGAAACCAG GNGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAAACA CACACACGNC  
 TCACAAAACCT TCTGAATGTC GCTCTGTCTC CACCTTCTCC AGTCACOGAA AGACCTCGGC CTGAATTGGA GCGCGCAGCC  
 GTAGCTGTCC CTNTCCACCT GTNGCCCTCG CGGAGGCTT

SEQ ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNCGTGG AGGGAGGCAA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACAAACCAGA TCTCTTGTRA  
 ACTGAGAACT CCTTATCAC CAAGGGGACG GTGCTAGACC ATTTCATGAGG GWTCCGCTC CATGGGCCAA TCCCCTCCCA  
 CCAGGCCAC CTCCAACACT GGAAATAACC TCCAGCAGG CCGCCTCCA GCACTGGAAA TAATGCTTCA GCGTGAGACT  
 GGAAGGGGAC TGATGGAGCC TGGWTGTTK TCCCGCCCA GSTCTMACGC TGAACCGTAA TCCCCAATGC TGGAGGCGG  
 GCCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACCGGGC TGTCTCTNGT CCAGCTAGCC TCACAGGGAG TGGCCTCTAA AACNGGCGG CCCACNCCAT TTGGAAGCTG  
 TCCCGGGTTT TCCGTGAAGT CCTCCCGGC TGTGGTCTCC TGGATGGTCT GGACCAACAG CTGGGGGATG AGGGGAGGCT  
 CGGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGGTT TGGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG  
 TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CCTTACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT  
 GAGTCTGATC CAAT

SEQ ID NO:340: (Length of Sequence = 450 Nucleotides)

GGCCCCACAA TCCCCTCTG GCTCCGGGA CGGGCGGGC GGGGCGAGCG GGCGGAAATA ATTTINTGTT TGGTCGTCTC  
 TGCCCCAGTC CCTTCGCGC GGGACGGCGA GACGGGAGAA GGTGCGGGA GCGGGAAGCA GGAGCGGGAG CGCGCGGCC  
 TGGCAGCAT AGGGCGGCG AGAGGGCAG AGCAGGGATT GAGCACCTAC TGINTGCCCT CACGCTTTAC AAAAGGATTT  
 TCGTTGATG TTCACTACAG CCCCTGCCCG GGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGGATT TCGGAGAGGT  
 GAAGTCACTC GCCGAAAGTC GCACCGCCAG GGTCTGCGTG ACACCCTAAA GCAGTGTCA GTTACCCCGG GGAGAGCGCG  
 ATGAACTTGA ACCACTTGTT GGCTTGGTTC CTGCTCTTGC TCGTTTTTTT

SEQ ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAAACCTT GGCGGCACGG CTGTCCCTC GAGGCCCGC CCCTTCCCT TCCGGAGAGC CCACCGCTGG GTCTAAAGC  
 CCACCGCTGG GTCTAAAGC CCGCCGGTN TTTACCCAGG ACGGGCTGG GGAAACNGG TCTTCTAG CTCTTGGNT  
 ACTTCTTGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GTGGTAACCT TTTTAAAAA CATAAATACC ATACAATTCA TCCITTTAAA GTGTGTAATT CAGTGGTTTT TGGTATATTC  
 AGTGTGTCAC AGTCATACC ACTAATTCCA GAATATTTT ATCACNCCA CGGCTGTATC TCCATTCT CTCTCCCKG  
 CAGATCCTGG CAACCGCTGA TCTACTTTCT GTCTCTTACA GACTTATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

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TGCTCCAGGA AATTGGAGTT CNAGCTGAAG GCCTTGCGC ACTCCGNGCA CTGCTAGGGC TTCTNGCCCG TMTGCGTGCG  
 TCGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT  
 CTCTGGTGG TGGATGAGCT GCGAGTNCGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEQ ID NO:344: (Length of Sequence = 227 Nucleotides)

TCCGAGATC ANATTCAACC TTGCCAGAGG TCAGGSCCCC CGGCCTTGGC GCGGGGCCAG AAGCGTGACT TGGCCTSCTG  
 GAATGCATGC CCTTAAACAT CTCTAGACTA GGGGCAGTKT CCGCCAACCA TGGAGGCCCT CCATCACCAT CCCTGCAGCA  
 TCACCACCNT CCAACCCCCA TGTCCCACCC TGGNGNTTCC ATACCTGTAG TAAGAGAGCA AACCAAT

SEQ ID NO:345: (Length of Sequence = 249 Nucleotides)

GGGCAATGTT GTCACAGATG TGTGCAGATT TTSCAGAGGA CATAAGTTGG CTGTGAGGWA GAACACAGAG GTTSCCTATT  
 TTTTAGGCAG GAAAGAAAGC CTGCACTTTT CTGTGTGTGT GTNTCAATAA ATCTGAATAA CACCTTGAAA GGGTTAAAAA  
 GCTGAGCACC AGGTGTTTTT TTTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGTTA TCTCCCTTCC TTCCCCACGA  
 GCCAGCTTA

SEQ ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCTAGTCCC GCAGCCGCTG CAGCCGCTGG GTTGGCGGAA GAGCTGGACG CCGAGCTAGA GGACGAGGCA GAGCTGGACA  
 CAGTGGCGGC GTGAATTGGC CACTNCTTTC GGAGCCGAN CTCTCCCGCA CTGGAGAGGA CTCTTCTTG GCTGGGCGGC  
 TCTTGGTTCC GCTCCCGCTC TGCTGCTGCT GCGCGCATTT NGCGCGCGG TTCTTGAACC AGACCTGCAG TGGGCCGAT  
 GGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTTNTTGC TCCACCGNCC CGTGGACCCA ACTCCCGGTC CAGAATATCG  
 CAATCCTTTC TCACCGAGGC CTTGACCCCT TCCTGT

SEQ ID NO:347: (Length of Sequence = 155 Nucleotides)

GCOGCGTGC GTGGATGCC CAGCTGCGT CCAGACCCGC GGGATGCAGA CCCGGTTCAG TCAGGCTTGA GGGCTGCTCC  
 GCATAGACCA ACCTCCGGG AAGGCACACA GTGGCCGAGG GCCCGCGGC TTKGGCTACG GCTGTRATGG TATCT

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCGATT TAACTGATTG TCTCAITCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC  
 TAGAGAGCAC TTGGATTTIN AATTTTCTTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCTNCTGTTA CACAAGGCCT  
 GINCTCTCTT TACATCTTCA GACTTAAATT CTGTAGAAGG TAACAGCTTT GTATTAAGGA CAGAAGCTTA GTGGTCACAA  
 ACAAAAAATA AACTTGAAAT ACAATTCGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACAT TACANTINACT  
 AATAATTTGG GCAATGAGAT TCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AATTCCTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTCAAGTAT CACAATGTTT ATTGATAGAT ACAAGTATAT  
 AAAATCAGGG CATGANCATG ACTTGATAAA TTAAGTAGAC TTAATTTCAA TACTATAATA GGNGGGACCA ATTCAAATTC  
 TCACCATTTG TTTCACACCC ACAAAAACCA CTTCAAGGGC ATTAACGNTC TCTCAAACT GNTCAGTTTT GTGCAAGTAA  
 ACCATGTTTC TTTTAAAAAG ACTTGTCAC TTGCCAGGC TCAAGGTTAT TAAATCTAG GCACATAAG NCCATTACTA  
 GAGGTAGGAA ATACAGGCAA TT

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SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGGTT TGANCCGTGA ACAAACCTGT GTTTTGAGTT  
TAGCTGACAT TAAAGAAAAA AGTTCATCAC GTGACTGTTA ATGTAAACCT GGTATTATAA ATAACTATTT AAAACAGGAG  
AAATCTGGTA AGTGTGTAGG NITCTAAATT CCTTTTAGTC TGTCACTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA  
AAGAGATTTC ATTTCTTTCT AATCACTTTG GCTTCINTCT NTTTTNTTAA GTAGGTAAAA ACCTTCCTTG GTGGGCACCT  
AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGTGAAGGC TTAAATCTA AGGA

SEQ ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTGGCCAG GGCTCCTCTT  
GTGGCCATGT ACCCAGGGCT GGCTGGCCTG CCATTGTGCT CTCCCCGGAG ACAGCCGTTT TTCTGCAACC ACACCCCGTG  
CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCCTAAT GGGATATCGG  
TGATCACTGG TCCACCCTTC CTGTCAGGGC TTTTCTGGGG GCTGCTCTTG GAAATGAAGT CTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCATAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATGTATTCC TCTCATTGAT  
ATATTATCA ACCTTCCAAT TGAAGGAAGT GTCITCTAGG CCTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT  
GCATATGATA AATCTGTCAT GTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTTC GGGGAAATTA  
AAATGTGATG CAAAGATCCT TATACTTTGT

SEQ ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTTATATGA AATGNCCAGA ACAGGGAAAA CCTATTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATGTCTTC ACGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG  
GTGCCTACAC AACTTTNTGG NTGTACTAAA TGCCG

SEQ ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAATTTT TTATTTTGT AGAGATGGAG TCTCCCAATG TTGCCAGGC TGGTCTTAA CTCTAGGCT CAAGGGATCC  
TCCCAGCTGG GCCTCCCAA GTGCTGGGAT GATAGGCATG AACCACCAT CCCAGCCCAT TTCTTTTTC CCTTGCACA  
GTACCAGATA TATGGTTGGT ACTGCAGAAA TAATTTCCTC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTCC  
GTCTAGCCAC TTATTTATGA TTGTACAAA ACATTCCGCT TTCTGAGGTA GACAGTGATA TTCTGAAGCC ATCAGTAAGA  
GTAATTTTC AGTNTTGTG AAAGTGNCA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEQ ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGAACATCT CACTCTGATA GATTTGAATT TNCATTCTT GCTCTGTGAC AAAACCTGA  
GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTCTA CCTGGNAATG GCTATAGTGG TGTGAGCTG CTGTGAGATG  
ATTTACTGCA ATTTGTCACT TTTTGAACT GTTCCAAAAT AGTCTGCTGA CAGCCCTTCC CCTCATGAAA ACATCTCTCC  
TTTTCCAGTT AAAAAACAG TCAAAAAACA CAAAAAAGG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

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GGAAATTAGG TTGGTTATTA ACATGTATAG ATGGAAGTGG GGTGAAAAA AAAAGGAAAT GGAATGGAG TGAAGGGTT  
 GGGTGGGAGA GACACTTCAC AGTATTCTTT TTGTTTGGAC TTGGGAAATG TTACTATTTC ATAACTTAA AAAAATGCAA  
 AAAAAAATA TCAAACTAG GTAGGAAGGA GAACAAATG AAATATAACC AGAAAGGAAT AANCTAACA CATTTTGAGT  
 GAATCACAAA GCCAAACCA AAAAGAGCTA ATTTAAGTCA CTTTAAACT TGGTGTAA CTACCTACAC TCAGTCTAAA  
 AACGNAAT AAGGGTAAAG AAATAGTGA ACTCTAGTTA GTTGGGTCTT TTCTTTACAG CAGTATGGG ATGGCAACCT  
 G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAACA CCTCATTAGG AAACGATCT CAGAATGANC TCTGGAGTAT GAAAAGATC ATTCTTTTT  
 GINCTGTAA CTTAGCATTC CTTCTAGGCT TCTNCTCCTT TAATTGAACC ACAGCTTAGC TCATGTATTC TTTTATTAA  
 ACCCTGCTCT CATGTCCATA AGATTAGGA ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN  
 AAAAAATAAG NCTAAAATCA GGGGAAGATG TATTT

SEQ ID NO:358: (Length of Sequence = 314 Nucleotides)

GTGAAGGAAG TATGAAACT GAGACTAATA TTATGAAGTC TTTTTTTAA TCTTTATCTT ATGCCCCAT TTTAACCCCT  
 TGGTGTGTA AATGGAAAT AATATNCTC TTCGCGATAG ATAATATGTC AATAACCAA AGGTGGCCTT AACCAATAAT  
 TGGCCCACT TTAAATTATT ACCCTAAAGA TATATAAAT ANCTAATCTA AAATTAAATG CAATTTTGCT ATGACTTAA  
 GTGTCANTAA TCTGTATAA GNGATCCNNT TTATGCAGTC ACTTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAAACAAT GGAAATGCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC  
 GACAAAATCA ACTGTGGATC CAGAGACGAA AAAATGTTCT GTAGTGCAA GGTAACTGG TGAGATGAAA AAAAAAGAAC  
 CATTTTGA AAAANGGAAT ATTAGAAATA TTGAAGTAA TATCATAAGT CATCTATTA CAAAGGCATT AACTCCTTCC  
 TATCAATAGA ATGTACCAGT TTAAANTTT TTAGTAGGAA TATATCTTT ATTTTATTAA CAGAAATCAN GGGACAAAGA  
 GGATTGATC CATCCATACT TCCTACTCTT ATTGGGTTTG TCAAAATGTA GG

SEQ ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATCTTTT GATACCCACC TAATAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGIG AGTNCCTTAT  
 TCATCAAGA CAGAGCTTAC CTTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTCTG AAAGCAGTTT GTCAAGTGT  
 TTCAAGTAA TCAAAAGATC GGTAAATCAA TTCTTAGCG AATTGGATTA GACACTCTCA TTCAAATGG CAGTTTATG  
 CTTACTCAT GTCTTGAATA ANCTTAAATA CTTTATGCTA TCTTCTGCT CCATTATTA TGTAACTACT GGCNCTTAG  
 TATCTGCTT TAGNNCATAT AAAATCACCT NCAGGTATTT TCCATCACGG ACACAGAGGC AGGCACAAAT TAACC

SEQ ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTTTTTGT GGGGAGAACA TTAAAGACCA TTCAATGTC ATGATGAAAG CTAATGGGAG AAGGCTTTIN TNCACAAA  
 ATTTCCTTA TTTTINCAAC TTTATTGAGG TTATAATTGA TATTAAAAA CTGTACAGAT TTAATGTGTA CAGTCTAATG  
 AGTTGGGACA TATGCTTACA CCNTGATGC TGTACCACA GGCAAGGTAA TACACATATC CGTCACCTGC AAGAGTTTCT  
 GTGTTCCCN NIGTTCTCA TTTTGNTTTT TTCAAAAT TACTTTATAG GGTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

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ATGCTGGAAG TGATTCTGTC AGCTCAGGAT TTTTTTTTAA AGCTACATTG AAAATATAGG TTTATTTTTT GTNCAGGTTT  
 TNCITTTTATA TTTTTTINCT GCACAAAGGA GGAGGATTTT CCACTTACTC ATATCGAGGC CAGATTTTTTA AAGCCAGCTA  
 AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAAA AAGGTGGGGT GGCGTTTCAT GTAATGGGAC  
 ACGATGCCCT TCTTGCTGAA CGACTGGAAA GAGCACAAGG AGCACTTTTC CTCTCTCACT GCCCGCCGGA GTTCTCTCGT  
 CAGCTGAGGG GAGTCTGCTT TGGGCGGGGA TGGGATGATC ACTTTGTGTG GCTTNTGCTG GATGGTCTCT GAGGCTGCCA  
 AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTGAAG TAAGCTTCC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG  
 TTATGCAAT TATTTAAATC TGCAGTGCCA ATCTTTTITT GATGGGTGTG CTAGACCAC ACATTTAAGA TAATTATTAA  
 TATGTTAGAA CCGAATATAT TTTNATGATT AGTTTTTATG TGTCAATTG ACTGAATTAA GAGATGCCCA GACAGGTGGT  
 TAAAACATTA TTNCTGGGTA TGTTTGTGAG GATGTTTCCA GAAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG  
 ATAAAGATAA TACTTGTCTAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA ACAAAAAGGT GGAGGGAGAG  
 TGAATTATGT CTACCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCC

SEQ ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTGTGTAA ATACACTTTA TTTTCCATTT TNCOCGCTG GCGACATGT GAACAGGCAG TGTGCAAAT GGTGGCGGGC  
 AGTGTAGGGG GCGTGTGGAG AGCCCGTGG GTGNTGCCC CGGTCCCAG GCTTCGTAAC ACTGAAAAGT GGCAGCTAG  
 GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGNAGATTN CTGTAAACGC TACTCTACTG GAGGCTCCGG  
 GAGCACCGAG NGGGGCACTC CCCAGGTCA TGAGGCCCGG GG

SEQ ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCTGCTT CAGCCTCCCA AGTAGCTGGG ATTTTCAGCAC CTGCCACCAC GCCCAGCTGA TTTTGTATT  
 TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCGGGCTGG TCTTGAATC CTGACCTCAA ATGATCCGCC TGCCTCAGCC  
 TCCTAAAGTG CTGGGATTAT AGGCATGAGC CACACANCT GGNCTTTTIN TCTGTCTCT AACTGTTCCC TTTTATTTCC  
 CTATGGAGCA TCTACTGAGC CCCAGCCGAG AGTAGAAACA AACCTGCTGG CTGCTCTNAA GGCATTATA GTCCAGTTA  
 GGGGNGACG GGTCACTTAA CCACTTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG  
 CTTTACTAT TGACAAAAGC CGGGGTCAA AAAAGTAGTT TAAGTCTTAA GNTGAATAT GCATTAAAGT ATGCAGGTAG  
 CAAAGATGTA ATAAATTTCC TTAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CCNGTCATTG TAATTGACCC  
 NTCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGNTTTT TAAAAACCAT  
 TTTCTGAAT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEQ ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAACAA ACAACAAAC CTTTAAGTAC AGTAGTTCCA AAACACACTG CTAAAGTTAT GAAATAATTG TGGATCATTT  
 CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGCATATAT ATATATNCNC CTAGATTCC AGCAGAAAGA  
 CTAGTTTTAA GTAGTAACAT GCACGTGAA GTATTCTACA TTTTCAGTCA CTAAACTTT CCTCTCTCAG ATGGCTACAA  
 CTTTTTAATA TTCGAGGINT ATTTTATATC TAAGTAAAAG GATTCCAGAA TACTCTGCC CTGCAAAACA GTAGTGTTTT



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AGAAGNCTCT NGGAAGTGT GCTGTTTACC CTTTAGCAAA GNGTACAAG AGCTATTAGT TGTAAATAATA C

SEQ ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTTCCCTTC TGCACGCGT TCTCTGCTC CCCATTACA TGGTTTACTT CATTTTCCTC TTCATCCATT GGATTACAT  
GTTTCTAGG CCAATATTCC AGGNGTGCTT GGAGTAAAAG TCCTCTAAA TTCAATTTTG GNTCTGACCC ATCAGGGCTG  
CTGAAACCAG CATCTTTTGC AGAAACCAG GCAGCAAAAC AATCATTTC ATCCAAAGTA ATAGTTACA TCCTGTTTT  
TAAGTCTACT GAGAACCAAT TTGGCACATA CACCATTTTA AATCTTINCT TAATTTTCATC TTCAAAATCC ACTTTGCCCA  
GATCTTCAAC TTACATGGC TTCAATACAT CCCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGTATT CTTTAGAAGT TTTTGTGTTA CTATGTTTT NCTCTTTTAC ATCTCCTTGT GAATTTCTGT CCCATTTTGA  
AGTCTCTCTT TGTTCTGAC CAAGATCCCC TIGATGTCT GTAGCCAAAG ACTGAGAAAA AGAGTTATTC TGAATGATGT  
AGAGGTGAT AAGTCTGGTA AGAACTGTT GGACATACTC CAAGCAGCAC TGCAATGCAG TCTTTTGGGC TGCTTCTCTA  
CTCGGGTGT CTGTCCCTG AGTGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTGG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTTTTA CACTGCTGGC CTAATTTGTA GATATCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTCTCT  
CTATTTTNT TACCAATGGG TGCACCATG AATGTGGCC ATCAAATAGC AAATACCTC TGCTGTATT TCTACTNIN  
GTTTTAACTG GAGCCTCAGC TGAAAAGGTT TATGGTGCTG CTATTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC  
AGAAAAGCAG AGACTTCTTT TGGGTTTAAC ATCAGCAGAT GGAAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAAT  
GCATCTGTCT TCTTCTCAC TGGGCTTTT TTTGATGGCA TTCAGGAAGT TTCTGACTTT TCTGTATCG TTAATTCAT  
CTCTGGGGCT CATGTCTTC CAATTGAGGA GGATAATTCC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGTCT ATTTACCAT ACCCCAAAGT AAAGGCCAA ACTCCACCGG GGCCAAGTNT TTCTGGNTCA  
AAGTACCAT GTCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCTGCTCTCT CTCTCTCTCT GTGCAGGAGT  
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTG TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG  
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTTCAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA  
TCACCTAAGG GAGGTGGTTC CAGGTCTTCA TCTCCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA  
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGAATT T

SEQ ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATTGT TGTTACTGGG AGGTTGAAGG GAACACAAAT TCAGTTATAA GTCTTTTGT AATACTAAGA GGGGAATAAT  
TAGGGAAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAA AACTTCAAAC AATTTCCCT GTAACATGAT TTTACTTGCA  
TTTATAAACT GATTTTTTTT TCTAAGCACT CTTTGATAA TGATTAAAGT TGGGGTTACA TTATTNAGG GTCGTCTAAT  
ATTTAAGGTG ACTTAAAAAC CTCACACAG TTAATCCCGA ACTGTGAAAA TTTCTCATCT TATCATCCCT CTGTTACTAT  
CAATTTTCTT CACGTACAG ATTCTTTTAT AATTACTTCA TT

SEQ ID NO:373: (Length of Sequence = 306 Nucleotides)

ATCTTTGTG CGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGGAGTTG AGTTTCTTTG TAAATTCGTG  
ATATTAGTTT CTGTAGAT GAATAGTTT TGAATATGTT CTCCCATTC ACAGGTGGC TCTTCATTCT GTTGATTTGT  
TCCNTGATG TGCAAAAAC TTINACTTTA ATATAGTTCT ATTTGTTTAA TTCTGTTTT CTACCCATG CTCTGAGAT

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CTTAGCCATA AAATGTTTGC CTAGAACAAT GCCCTGGAGT GTTCCCTG AGTTTTCTTC TGGTAG

SEQ ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTTGGT TGAGGTTTCT ACCTCATTAT CCAAGATATT TNCITTCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC  
 ACCCTTTGTA TCCAGGATGA TCCTTNTTG AAATCCTTGA TTTAATTATA TCTGCATGAC CCTTTCNCCA ACTAAGGTTA  
 TATCCACAGT TACCGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAATTCT  
 ACTACATCCC ATTGGCCAAT ACTTCTTACA TGATGACA

SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGTA TTTTGTGTTG TTTCTGTAGC TCCAGCCCCC CAGAAGGGAC GCCTACAGTT GGCAGCTATG GCTGTACCCC  
 TCAGTCATTG CCCAAGTTCC AGCATCCTTC CCATGAAGTG CTCAAGGAAA ATGGCTTCAC ACAACACGTC TACCATAAGT  
 ATCGTAGGCG CTGCCTTAAT GGTAAAGAGT GTGGGGGGCA GGAGATGAGC CTCTGGGCCC GTTATTTAGA CCCAGAGTAT  
 AAGAGTTGGG GGATACGGGG ATAGGTGACT CTTTCTCTG ACTTCAGAGC AAAAAAAGA CATGACATTA TAGCAAGAAA  
 G

SEQ ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAAATTTA CAGCATGACT ACATATGTTA GGAAAAAAT ATCTAAAATC AATTAATAA GCTTCCATCT TAGGAACTA  
 AAAAAAGAAG AGCAAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT  
 GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTTCTTTG AATCAATTAA TAAAATTGAT AAGCCTCTAG  
 CCAGACTAAG AAAAAAGAGG TAGGGCACAA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCCTACAG ATCCCATGGA  
 TATTAAAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GTTACAATTG AGAAAACATA TTTAATAAAT CATTGTCAAT TTINATAATG TTTCAAGCCC ATTCTTTGTT GATAGCCTCC  
 ACATTTATAT GGTAAAGTCA TTGTGCTGT GTTCTTACC TATGACATTA TTTNATATC CCTTCATTG TGGATCTTAA  
 GATGTTGCAG AAGGTTCAIT CCTGTACCCC AATACAGATT CACTTCTTT AGCTGCCITT NCTAGACCA ATATGCTTTA  
 AAAAAAATG CGCAAACAAC AAGCAGTGAC AGCGGCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA  
 AAGGTGTGTG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTT CTTTCTGAGG CATTCCCTCC  
 ATTCCCTTAA CCGGATACA TGCATTAGGA ATGTAGCAA ACCCTTCGGG GAACC

SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCACG GGTTTATT ACTTGACATG CTCTATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA  
 ACTATATGCC CAATGCTAAT AGTGGGTATT TATTGGTAAC ACTCTTTATC AGGTGCTATG ATTGTTGATG GCTTTATTIN  
 CTNCTTCATA TTINCTATAA TTINCTACAAT GAACATGTAT GTATAATCAG ACAAAAAAGC CAAGAAATAT CCATAAGTTT  
 TNCGTGTCAT TCATTATCC CATAAATACT TGCTGAGCAC CTGCTGTAAG CCAGGCTCCG AGCCGGCTGC TGGGTGGAGT  
 GCCGCACCCC AGGGAACGGT CAGCCCTCG

SEQ ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTTTGAATC ATATTTTACT TATAGGTTTG CTGTATATAC TGATTAACT TCTGAACCTA AAGATTCTCT ATAATTAAAC  
 TAGCAGAAAT ATAATCTGTC CCTTACCCAC ATTGTAAGAA TGTCTGGTGG GGGAAATCCA ATATTGACCT TCACATTCCA  
 CATGGAAAT CTTTGTCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTTGTG AGTCTCAAGT TTGTTCCCCA  
 AACAGCAGC ATCAGCAACT GGAAATTGT CAGACATGCA AATTATCCAG TCCACCTGA GACTTCAGCC CAGATCTATG

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GATCAAAAAT TTTGGGGGTG ACCCTGGGCA ATATGGGCTT TAATAAGNCC CTAGGATGGG TTCTGATGCA TGCTCCAAAT  
TTGNGGATCA TTGNINCINT G

SEQ ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTTINAGAT GGAGTCTCAC TCTGTGCCCC AGGCTGGAGT GCAGTGCCAT GATCTCGGCT CACTGCAACC TCCACCTCCC  
AGGTTCAAGC AATCCTTCTG CCTCAGCTTC CCCAGTAGCT GGGATTACAG GCACCTGGCT AATTTTTTTT TTTTTTTTTT  
TTTTGAGATG AAGTCTTGCT CAGTCGCCAG GNTGGAGTGC AGTGGTGTGA TCCTGACTCA CTGCAGCCTC TGCCCTCCGT  
GTTCAAGCGA TCCTCTGCC TCAGCCTCCT GAGTAGCTGG GACTACAGGC ATGCACTACC ACACTTAGCT A

SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCTGTGAA CATATATTTT NATTTATCTT AAATACCTAA GAGTGAAATT NTGGTTTCAT ATGTGGGTAT ATATTCAACT  
TTGTAGAAT CTACCAAAAT GATTTTCCAA GTATATGTAT AATGTTATGG TCATCAGANC TACATGATAG TTAGAGTTGG  
TTAACATACT CACTGCAATG GATTGACTTT CCTGTGATTC AGCTATCCCA CTCTTAGGCG TATACCCAAG AGAAACTCAT  
AATGTCTTGG TGTGCAGCTT GTATGCTAAT GATTTTAGTA GTATTTTTTG TAATAGCCAN AAGGTGGAAA CANTGAAAC  
TTTCACGGAA ATGATTAATG AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANTGAAGTG  
GTATACAAGA AACACCACAG GTTAACCNIT GAAAGTATAT TA

SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTTT GGAGCCANTC CCATGTGAGT TTGAGTCTCA GAGTGACTCT GGGCAAGTNA CTTAGGCTTT CTGAGACTCA  
CTTCTCTCCT TTATAAATCA GGAAGAATAA TCCATTGCTC ATGAGTTGT TAATNAGACA TAAATGAGAT AGTGTATCTA  
AAATGTGATT TGTTAAGTCT AATACGNAAT AGATGCTTAT TTGAGTGTTC CTNATACTCA GGATGGTTCT TGGGATATAT  
TTNCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGGCCTGAC  
CTGAAGACCT ACCATTT

SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GTGAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTGCTTTTC TTAGGTTTAC AAGAAATGCG CCGGTGGGGA  
ATGAACINTT TCATTAATAA AACCTAATTT GTCTTGATCC ATTCCACTCT ATAATAAAC AAAAGATTTT NTAGGCAACT  
CGGAATATAG CTCTTTTGAA AGTACTCGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACGACA TAATCTTGAT  
CINTTAATTT GTAAATATIG ACANITINCT TTCTGCACAT TTAAATCTTA GTTTCCCTTT TGATTTINCT GAAGGTGCCA  
AATTCATTT AACINCITTA CAAGTCTTTG TAAATTTTA AATGCATAAA GGGGGGTTGG GGCAGGGGG ACCNCGGANG  
TAGTTTAAIT TTCGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

GGACTCCGT CCCAAGAAATA AGTTTGTCTT GGGCGGAAAG TATGTGGTTC ATCCGAAAAA AAAGAAATCA ATGATTTGTG  
GCAGTCTTTC ATGTGCTTTT GGGCATTINC ATATCTTCCT TGGAGAAATA TCAATTAAGA TCATTGCCG TATATACATA  
TATTAAATTT ATGGGTGATG TATTATGGCT CATACCTGTA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GNTCACCTG  
AGGTTAGGAG TTGAGACCA GCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGTTAGC CAGGCATGGT  
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTCCAGT  
GAGCTNAGGA TTGTGCCACT

SEQ ID NO:385: (Length of Sequence = 404 Nucleotides)

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GTGACAAATG TTAAGAAATT GTGTGTCAAG CAAAATACCT TAGAGGCCAA TGGGCCACAT GTTTTAAATA TCAAGAGATT  
 ACACACAAAA TTTNTTTTCT AGCTTCTTTT GAAAAATCAG AATTGGGAAG ATGTATTCAT GAGTGACTGC TGCCCCCTTT  
 GGTGGGACT CGTCCCTCA GGTTCATTAC ATGGTCATCA ATAACCATT CTCTGGTCCC TGCTTTTGTC TTGTCTGGNC  
 TCTAAGCATT TGAATTTTGA GTATTATAAG AAAACTTAAT ACTTNTCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT  
 ACTACGNCCT ATTAAAAGCN TTTTATCAAT AGCCNCCATT TTGGAGGGGG GGATTTCAC TGGTGCCING ACTAGCAAGG  
 AATT

SEQ ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTTGTTGA CATTTACGTG GTATCTTTAG AGCAAACACA GAGTGGTTC ATAAGCTGCA GTGTTTLAGT ATCGGTGGGA  
 CTGTGGCATG GCGTAGAGGA GTNACAGTC CAACTGATG GCCAGCTCT GACCTCCAG GCAAGTGGAC TCCGAGGAGT  
 ACCAGCAGAT CTCCCATCAT GCGTCGGGGA GGGCTCTGGG GAGAGTCAGT GGGCAGGAGA GGGTCAGCTG TGCAGGCTCC  
 AGGGCCACG CCGGTGCTTT CCGCTCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTTTAAATG ACATTTTATT TAGGCCAGG GACCAGGTAA CATTTATTTT AGGAGGAGAG CAAAGGTGT TATATTACTG  
 CTCTAATTA CTAGAAGGA AAGCATTTC TACACTGCCA TTATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC  
 TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAAA  
 AACACTGGAT ACAGTTAGTT TCTGTTGACA GTTTCAGAAG AAAATCCAC AGATTGGACA GGCTGCCTGC TGAAGGGTT  
 GTCACTACAC ACAGCATGCC CTGAACCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGAA TTTTACCACC TGTTGTAG TCTGGTTTA TAACCTTACC GTAAATCACC  
 TAGAACACAG GCTAGCCGAA TCGGGGTGTC TGGTATGGCA ATATCCCGAG AGCTAACCTG GGGCTGGGGC AATGTTCTGT  
 GGCTGCTGCA CTGCTCTTA ACAGGCCAGT TTAACACGTC CAGTCTCAG GGCCACATC TCCAGGACAC AGCAGGGAGC  
 TCACAGTAGC TCAAGACCCG GCCAGCCTC CATCCCCAGC CTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTCCG  
 TCTTGGCTGA GTGGACAGCC CCGTT

SEQ ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACTGCCC CAGCAGTGA TGCAGGAAGA CTCTCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG  
 AGCGGGAGAA TGCAGCCAG CTCAAGAAGT GCGGGGAAC GCGGGGGNG CTGCAGTATC GGCCCTCAG GCGACT

SEQ ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTCGCT CTGTACCCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CCGCTCCCG GGTCAAGTG  
 ATTCTCCGCT CTCAGCTCC CGAGTAGCTG AGATTACAG CACGTGCCAC CACGCTGGC TAATTTTGT TTTTCAGTAG  
 AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAACT CTTGACCTCA GATGACCCG CTGCTCAGC CTCCCAAAGT  
 TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGAGTTG  
 AATTGTGTGA CTCTTCCCC TATCTGAGGC CCGTTTTTC TTCA

SEQ ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCA TCTGGAGCG CTGCTGTAAG GACTGCGT GCAGCAGGGG AGGCACAGCC  
 AGGCCTGCGC ACTAGGCAGA GCTGGTGTGG GAGCCAGGAG CAGATGAGAG CCCGCTTC TACCAAGTTG GCACTGCAGA  
 AGGCCGCACT CCGGGTGCT GATGCCGAGT TCAGCTCCAG ACCCTGGCAT CCCTGGGCTN TCAGGGGCC AGGAAGCCCC

CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCCTG GGGCAGAGCA  
AAGCT

SEQ ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACTTCAGCA  
TATCCTCAIT GTTCTCATGG TATTAAATTG AAGATACTTA CCTTCGAACT AAATCTGGTT TTAGAAGAGC TGCTTGTGTG  
TCAGCTCCAA CTGGTTGGGA TACAGGCTGT AAACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA  
ATATACAATT TGTTACTAAT CAGAAAACAC GATAGTTTTG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTTATTGAA  
TGTCIGTATC AATCCTATTA TTAACATTAT TACCAAAGGT AAATAAAATT T

SEQ ID NO:393: (Length of Sequence = 404 Nucleotides)

CCTTTAGTA GCTTCTCTGA GGTAACCA CTTCCTTTTG ACCATCTAGC GCANTCTNTC TTTACATCAA CCATTTATTT  
CAAGTGTAGT GTGCTTCAGA GTCTGAAAGA GCTATGTCAG AATGGCTGT TGTTGGCTTC TATGGACATT CACATGAAAC  
CTGTACAAA CAGTCTCTA GAGACAATT TGGGTGGATC CATGAACCTCT GTGTCTAAAC TGATCCACTA TGTAGGGTGG  
CTATCCACTA CTGCAATGCG CTGGGAGAGC AACAACTCT TCTGTCTGCA CTTTATTTTG GATTCTATG AGAAGGTGTG  
TGACATATAT ATAAATNATA ACCTTCCATT AGTGGGTATT GTTCTCTCT GGGGATCCTT CTATCTGCA CTCCTCAGCC  
TGGG

SEQ ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGGTGAATGG CTGCTGTTAG AAGCCCTGGA  
GACAGCCTGA GGTACAGACC CAGCCCCACT CCTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACTA GGACTTGGTT  
TCGGTTTCTC ATAGAGAATA GTACAGTGT GAATTAATA TATATAGCTT GAATAAAGTG CCCAGCTTGT GGGTAGCTGC  
TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA  
TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCAGTTTA AGGANGAACA CAACTCTCTT CATTTATAGC GNCCTCCAT  
CAGTGAGTAG ACGCTT

SEQ ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGCTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT  
GAGTGAGGNC AACTGAAATA ATTATGATAC AATTAAAGGT GTTAGGTTAC ATTGTATAG TTCTTTAAAA TATGCATTAT  
TCCACATGAT CAGAAATATA AAANGANCTA GACAGATACT GTTAGAGAGA CAATTAATTT AAATTGTGTA CATATTGCTT  
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTCT CAGTTAGGG TGCTTTCTTC CCCGGCAGAG TTTTTOGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC  
TAGAAAAGTC ACTCCAAGCA AAGTTTCCCTT CAAATCTCAA GTCTCCATT CTCCTAGACT TCACGCGGGG CTCACGAGGC  
CGGAAGAACT CCCGCACAAT GCTGCTCCCA CTCTGGGGA GGTCCCGA GCAGGTCCGA GTCTCCCTCT TTCACAGCC  
GCACCTCCGT GGGCTGCTTC GGCTCCTCAT CCTGAGCGC TTCAACGAGA CCATCGGCCT CCAGCACATT AAGGTGTACC  
TCTTOGACAA CAGCGTATC TTGAGCGGTG CAAACCTGAG TGACTCCTAC TTNACCAAC CGTCAGACCG NTACGTGTTC  
CTGCAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

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ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCTGAGC TGCCATTTTC TCATGGTAAA AGAGAGATAC TAGAGGAACC  
 TGCCTCACAG GATTGTGATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACTTGG AACTAAGGGA  
 AAGCCCGCAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAAGA GCGCAGGCAA CCCTTGAGTT GAGCTCAACG  
 CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC  
 TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT  
 CCTATGCAC TGGG

SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA  
 AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTTA ACACCTAGCA CAGACGTATA CCTCCAGGNT CCTAGCTGCA  
 TTTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCTCTA  
 TGTAGATTTT TATTTATTTT TGAGGGCAAC CCAACTTCCA GGCTCTTGGA AGGAAATAGA CTGCAGCCCC TAAGTGTGAT  
 CAATACTTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAACATAA ATGTACACTT TTACATTTTT

SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTTAC AATTTTACAC CTTCAGGAAG GCTCCAAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC  
 TTCTCTTCAA AAACAGGAAT ACATTCATTT TTTCTCACTG TGTGAATCAA GTAATTATAC AAATAAACAT CTGAACATT  
 TTCCITTTTA ATATATTTAT ATAATATATA TTINTAACAG CTTTACAAAT AAAGGCAACG GTCCTTTTCT AATTTTCATG  
 CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATTCAG GGNATTTTT TNCTCTCTAT GGTACTTTGT ATTTCACTTT  
 ACTT

SEQ ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCTG AGTTTTGTTT GAGCATCTTT CAACATGTAC CATATTTATG ACAATCTCTT TCCATAGGAT CTATCTGTC  
 TGCAACAAGT ATTGATCTTA CAGTAAAATT TTTACAAAT TCATTAGATT CTATGCTCTT TTTCTGGTA GGAATTTTTG  
 TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGCTGCTGA TTCTTAAACT GGCCTCTAGA TTTCCAGATT  
 TCTTCGGTA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCTTTG AGATTAACTT TCTTTTGAAA TGTCTGCTG  
 CTCTACTCTT GTATGCTTG GNCACGTT CAAGCTTCCC ATCTAGCAA ACCAGGGTTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GTTTTATGCT CAAAAACAAG AATTCAGAAG CAAAGGTGGA GAGACTGTGG GTTGGGGAGA TGGCAGGAAG GGGGCAAGGC  
 CTTGTCCAG CTCTCCCTTT TGTCTTCTT CTGACCTTCC TGGCCGGAGT CAGGCCTAGG GCCAGGGCAT CTGGGAGGGG  
 GGCACCTTCG TGGCCAAGGG AACAGTAGAG CTATCGGGG CAGTCTTGA GGGGTGCCCT GGGCAGGAGG GGCTGCAAGA  
 TTTNCAGGA GGCAGAGTTC CCCTCCAGA ATCCAAAAGC CGGTAGGGCG GGGGCAAGG CCCCTCGTTT GGCAACTNAG  
 AAGAGCGGC TTTTGGCG

SEQ ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCCAGTGT ATGAGGACGT CCCAGCGAGA AATGAAAGGT TCTATGTTA TGAAAATAAA AAGGAAGCAT TGCAAGCTGT  
 CAAGATGATC AAAGGGTCCC GATTTAAAGC TTTTCTACC AGAGAAGACG CTGAGAAATT TGCTAGAGGA ATTTGTGATT  
 ATTTCCCTTC TCCAAGCAA ACGTCTTAC CACTGTCTCC TATGAAAACA GCTCCACTCT TTAGCAATGA CAGGTTGAAA  
 GATGGTTTGT GCTTGTGCGA ATCAGAAACA GTCAACAAAG AGCGAGCGAA CAGTTACAAA AATCCCCGCA CGCAGGACCT  
 CACCGCCAAG CTTTCGGAAA AGCTGTNGAG GAAAGGGAGG AGGAGGACAN CTTTTCTGAC CTATCTGGG AGCAACCCCC

SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTTGACTGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTGCCC AGCCGGAAAA AGCATCTCTT GAAGGTTAGG  
GCATTTTGTG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA  
ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAACTGAA GGCCACCTGA TCTGAGATTT TGGCTCTTAG  
AATACTCTTT NCTGTGTC TCATCCTCATA TGGCTTACCT CTGAAATATA GAATATATTT CCTGTGTGAG CCTGGTAGAG  
TTGGGTTTGT TTTTGTTTTT CAAACAGTAA CTTTTATTTG ATTGTAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG  
TCCTAAGGTT GATTTT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCINACTC ATGTGTATGA GTAGGGGGA GGGCTTCACT GCCTCANITT CCCCACTTT GGACCTTAA TCTCTCTCTG  
ATGCCCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTAA CAGATGCAGG ACACACAGCC TTGTCTCAG  
ACCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTCGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG  
TGTGTGCTGA GGGGTGGTGG GGGTGGGTGG TGCTGGGTGG CTGGCCTGGG AATACTTTTC TTAAGCTAAG GCTGGGGCTT  
AGGGGAGGGC CAGAGGAAGG GTAAATAGTT TGCCITGGGG GGTGCTGG

SEQ ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGTCTCT CACTCTTACC ACAAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT  
ACAAAGATTCT TCTGCAGACA AAACCAGCTA GCCAAGGTT CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA  
AATATGTACC CGGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCAT  
TGAACAATCT TTATAAAGGT TTCTTCATGT TATTTACAAT TCAAAGTAA TTTACTTTAT AAGCAGCTAG GGAATCTTT  
TATTTAGTAA TGTCTTAA TAAAAGTTTC ACATACTGG CTCTGTCCA AACCATGGAT ACTTGAGCTT TGTTG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTTAA TCTAAATTTT ATCTTAATTT TTATTTTAT TTCTTGTCT AAATTTTAT CTAAATTTT TCTAGCTCT  
TTATTACACC AAGACAGCTT CACATTTTA TTATATATTT GTACATCTCA TGTAAGGNAT TACCGTATAT AAGCTAGTGT  
CATACTTAA GTAGCCACAT TCATTCAGTA TGTTTTATGT TTCTCTCTG ACTGGATCTC TGATACATTC TTCTCTGTT  
TAGCTGCTTT TATGCAAAAG GGCATTATAT GTTTGTCAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGTAAA  
TATATAATCC NGTGGCCTGT TTCATTTGG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGTGTATAT TTAGTATCTT TNATTAAGAA GACTGGTGA TATTTGCCCT CAGCTAATTT ATAGAAAGGA TGATCATCAA  
TGTCCTAGT TTTCTCTTAA GTGGCTGTG TGTCAGGTA CATATAAAA TNCACTATA CAAATAGCTG GACAGTTGAG  
TCTCAACTAT GAAATCTTT TCTGGGATCA AGATCTAAGA AGTTGGTGTG TGATAGAGTG CAACCCATCA TTCTATCCCC  
TAAAAATCTG GGGTTCTCA GCCCAAACAT TCNCACTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCTT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCCTC  
CAATCTTTGC AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA  
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTG AGAGGGAGTT TGTTNCCTTTT TTTTCTCAT  
TATACTCTTA AATTGTGTG AGTTATCAA CAAACAAACA GANAAATGT TTGGAAAAAC CTTCATACG CCTTTTCTTA  
TCAAGTGCTT TAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

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SEQ ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCATCTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACCTAC TGCAGCCTTG AACTCCTGGA  
CTCAAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCCAGCTA ATTTCTAAAT  
TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAACCTC CCTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC  
ATGGCAGTAG AACAAAGTTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA  
CAGTTCACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC  
TAGAAAGGTG TCCTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAAGA CCATTAACTT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG  
GAGGCCAGTG TACATGTAAA TGCCACAGC CCAGCATTTG GTTTCCTCC CAAGNCCCA GCACCAACCT CTGAGCCCAA  
GACCTTGCTT GAAACAAGC AGATACGAT TGNITCATCC TATTTATGGA CATGTAGGTC TAGTTGCATT TTCCTNGGG  
GGAGGGGGGA AGGTGAATTA TGTAACCTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGTGCGCA CTATCACGCC CGGATAATTT TTTTGTGTTT TAGTAGAGAC GGGGTTTCAA CATGCTGCTC AGGCTGGTCT  
CAACTACCGA CCTCGTGATC CGTCCACCGC GGCTCCCAA AGTGTGGGA TCACAGGCGT GAGCACNCT CCTGNCACA  
GGTNGAGACC CTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACA GAGAATGCTA ACAACGGGG AAAGCACAGA  
CACAAACCTG

SEQ ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGAAGGC AATCACAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTG TCTTCGGGGG  
AACCAATGCC ACCNCCCTCC ATCCCCAGA CGGGGAGGG GCTGCACCTT TAAAGCAGGC CATTTGGGCTC TCCGGGCTCC  
AGGGCCAGCC CACCCGNTC CGGCTGGTGG ATCTTCTGGT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNTACA  
CTCAGTGCAG CTGTAGGGCC GNTCACCCGT NTGGATGCGC TGGTNCAGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC  
CACAAGTAAC CACAGAT

SEQ ID NO:414: (Length of Sequence = 304 Nucleotides)

GGTTTAAGAA CTGCGTTTTG GNGCCCAATC TTTGGTGAAG AATATTTTTG GGTCACTCTT GAAAAAATC CTTTTCAAGG  
CAGACAGCAT TTTAATGCTT TGCTGTGTTT TCCCTGTTT TCAGCTCTGN CACCAGCCTG AAAGATTAA AAATNCAAT  
TAATGGAGGN TTATTGTCC TTTACTCAGG TCACATTTCT GGGTTTAAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT  
TTAGCTGCAG TTTCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGCAGTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CGTTGTGGAG TGGGTGTCTT TGGATAGAAG GAGTGAGGAA CTGGGGGAGG AAGGCCTGGG GGATCCCTG GCGGGGCTAC  
TTCCTGGGCC CGGNATGGAC ACCTGGNAGC TGCTGCGNTT GTTGGGGTCC TGGCAGGGGT GTGGTGTGGC CCTCACCCT  
CTGNTCACCT GCTCCTTCTT NACAGTGCCT GGAGAAGTTC CCTGTNATCC AGCACTTTCA AAGTTCGGNA GCTTCTGCTC  
CATCCATCCT GTCACGTGGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNACANT TCCTGTGCTT GCTT



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SEQ ID NO:416: (Length of Sequence = 343 Nucleotides)

GATTTTCAAG TGTTTTATTT GCTTTCTGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCAGGCAG AATCCGGCAT  
 ATCCTTCTCC GCCTGGGGGG CCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA  
 GAAGCCACAC TGAGCCTGGA GGGACGGGC CCTCCTTCGG CGGCAGAAAA CACAGTCACC TTNGCAGGG AAGGGTTTTT  
 NOCTAGAAAG AAATTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCAGAACC AAGCCGGTGC TNCCCTGGGC  
 AANCAGAGAG TGAACTCGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAAAGGGG GAAAATAAAA GGAATAAAT AAAAAGCGCA CAGTTGACAC ACAAAAAAAA ACCAATGATG  
 GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTACCCGGG GATGCTCACA  
 TCINTCCCTN ACGTGGGCGG TGTAGCCCCC TCCTCCCAAG GT

SEQ ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAGTTGG CTGCAGAGCT GTCTTCAGGA TCATAGGCCA CTGCCAGAGT CTTGGAGAGA GGGAGAGATG GAGAGGAAGG  
 GAGTGAGCTT CGGTGGTCTG ATTCTGGCT CAACGACGCA GGAACCTCAG GTTCAAAAGC AGCTGACAAG AGCCCAGAGA  
 CCGTCTTCTT GCGTCCGGC AGAGCCTTCT GGTGGCCCGA CACCCAGGCA NGGAGGGAAG GCCCTGAAAT CCCGTTTTTN  
 TGCAAGATT NGTTCCAAG AGGAGATAAT GGCTCAATTT TGTCTTCCCA AGTTGATCA

SEQ ID NO:419: (Length of Sequence = 223 Nucleotides)

ATTGTTGGGA AGGTAACATT TTCCATGGT TTINATTTTN CCCAAAAGTA TTTATGTATT GATTTATTTG GNTCTGACTC  
 AGGCGACGTA CTGTAAGACG ATATTACTTT AATCATCTTC ACATCAGTAT TTATGGAATA GCCACAGGTG CCTCATCCTT  
 TAGTAGGAGT TAATTATACA TTINCTGGCC GAGTAAACAT NTCGAATGG TATGTATGTA TTT

SEQ ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTTAAGTA TATAACTTGC CCTATGCCAT ATTGCTTTAA TCAGGGGACT GAGCATCACA TTTAGATTGG  
 ATGAGTTTGG GAAAAGTTCT CAAACATCCA GACCCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT  
 AGGGAGCAIT AATGCTTTTG TGGTACTAAA CATATTTTGG AGCTTAGATA CAAATCCTTC TTGTCTGAA CTGATAGGGT  
 AGGAATTGTT TAGGTGCTTC AAATCCAGAT CTTTCAGGGG TTGCCACCTA AACTCATCTT TATGAGTAAC TCTAGATAAT  
 AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAATTATCA TGAGGNCCTG TTTTLAGGTT  
 AGGTCC

SEQ ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTA CTGACTTGTA CACAATGGAC CATATGINCT GTCCAAAATA CACCTACATT AACTGTGTG GAACANGAAC  
 CTGGGCTTTG CAAAAAGAA TTTATGATTA AAATGTAACC CCCCCAAA AAAAATGAAG CTTAGAATTA AAGGTAGCCT  
 TTTACCCAGA TTGTTACCA GNTTGTAATA TTCTAATATG GGTCAATTAAC TGTTACAAA TAATTATAT TGGNCCTAT  
 GGTTAAGGG CTCCAGATTG AAAAGGTGCT CTGAATCTT G

SEQ ID NO:422: (Length of Sequence = 220 Nucleotides)

TTTGTATTTT TAATAGAGAC GGGGTTTTC CATGTTGGCC AGGCTGGTTT TGAATCCTG ACTTCAGGTG ATCTGCCTGC  
 CTCGGTCTCC CAAAGTGCTG GGATTACAGG CTTAGCACT GTNACTGCTC GCGTGGCTGG CTGGCTGGCT GGCCTTCTTT  
 CTTCTNITT TCINTCTCTC TCTCTCTCTC TCTTCCTTC TTTCTTCTT CCTTCCTCC

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SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGTCTCTTA TCTGGGCAAG CTTTAGACAT ACTAGCTTGG TTGGAACCTG ATATTAAAAG CCTAAAACAT GTAACCTTNC  
 TTATCAGGTT ACTATCATGG GGAACATAAG ATTCTCGGTT TTTTGTATGT NCCATAACTA TACTTTAGTA AGCCCTGATA  
 TACGGTGTTA ATTTTCTTNC AGTGAAGGAA ACATGAAGAT ATATTTATGT GCACACATAC ATATATATGT ATATATAACG  
 TATATCAAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTTCTAGCTA AACATGATCT TGTGAAATTC TTCCATATGT  
 GGAAAAGTCG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGTGC TATGGTATAC A

SEQ ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGGAGCCT GAGGCATGAG AATCGCTTGA GCCCTGGNGG TGGAGGTTGC AGTGAGCTGA GACCCCGTCA CTGAACCTCA  
 GCCTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAAA CAAACANACA AACAAAAAAG CCTATTATAA AACAAATAGGA  
 AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAAA TTAAAATTAT CATGTACATT CCACTACATG  
 TCAAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG  
 CTGCTTATAT TTATTTGGGN ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGGC GGCCCTGGGT CTGGAGATGG GCGCTGGGCC CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC  
 CCACTTCCTT GGTCTGCACT GCTGCCCTCT CCCAGCACC CCTGGGGCAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG  
 GGGGGTAGAA ACCAAGGCTG GCAGAAGTNT AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACTTAC  
 TGTACCTCTT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNGAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG  
 TAAGATTCAG TCTCTGGGTG AGTACCCAGT TNCTGGCTTC TAGATGGGCG CTTTTTCCTT GTGTGTCTTC AAATGATTGG  
 ATGAGGCCAG GGTGCTCTCT TGGAGTCTT TCTGTAAGGG CAACTGAT

SEQ ID NO:426: (Length of Sequence = 417 Nucleotides)

GCCTGGNTCA TCGCTGTCTT TTCTCTCTTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGGTCTT  
 GAGGACCTTG GTGTGTTTCC TCTCTCTTA GTCTCCAGAC CCCAGCCTGT TCATTCTCTG GCTTCTCTTG GCACCCCTTC  
 CTTGGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGGT GGTGCTTGGG AGGCCGGGGC AGTGCCAGGG GCAGTCTCTA  
 TACCATCTTC CCACTGGCTT CCTCTCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGGNTTC  
 TGNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG  
 GTGGAGACAT GGCTCAA

SEQ ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCCCTGTCT CTACTAAAAA TACAAAAAAT TAGCTGGGCG TGGTGGTGGG CGCCTGTAGT CCCAGCTACT CGGGAGGCTG  
 AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANTTGCAG TGAGCCGAGA TAGTGCTCTT GCACTCCAGC CTGGGTGACA  
 GAGCGAGACT CCGTCTCAAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTCTTAC GTTTTCTTT  
 TTTCTTCTT CTCCACCCCA CAAGTTTTGC TTTTAAACCA AGGTGTCTCT GCTTGATGGA AATTCACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTTNACG TAGAGACGGG TTTCTCCATG TTGGTCAGGC TGGTCTCGAA CTCTGACCT CGGGTGATCC  
 GCCTGCCTCG GCGTCCCAAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCCGGT TTTTPTTTTT TTTTPTGTAT  
 AGCAATGGAA GAATGGCTTC GTACACACGN TAGAGTGGA AGTCCCAGGC ACCAAGGNTT CCCACCCTAG AAGCAAGCTC  
 AGGGCTTCTT CTTCATCCTT CCAGGGAGAG CACTGAGAGA TGATGGGGGG TTGGCA

SEQ ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGTTGGA GACAGGAGAC AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTACTG TCTCCTGCTC CCGAGTGCCC  
CANAGCCCAT GCAGACCCCTC TGCTGTCTAT GATATCCTGT TCAGCCCTCA ACTTTCTCTA CCATCCCTGC AACTGGGGTT  
CACTGTGAGC CAAACCAGTT TGCTTCTTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TATCATTCAA GGCATTTCOC  
ACCTCINTTC TCCACTCATA TCCCTTCCCA AACTGCCCTT CTTCATTTC TCGTCTCCAG GGAGAGGGAC TNCAGGCTAC  
CACAGNCAAA AATGGTGGTC TTCAGTCCTA CGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG  
GACACACAGA NGTGGATGCC AG

SEQ ID NO:430: (Length of Sequence = 332 Nucleotides)

CGGATCAGC ACCCGGGACA GCGCCACGCG CCACGTGCAG GGGTGGGGT CCGGGCGGG CTNGCGCTC GCGTCTCCC  
GGNAGINTCC CGTCCAGCCG TCGAGCAGGG TGCTTGANIN TMTCTGCAGA AAAGACTCTA GGACCCCGCC ACCATGTTCC  
CGGAGCCCC AACCCCGGG CCTCCATGCG CCGANACGCC TCCGACTCC AGTGCATCA GCCACGGCCC AGTGCCCCC  
TGGGCCCTGG NCACCATCGT GCTGGTCTNA GGCTCCTNA TCTTCAGCTG CTGTTCTGT CTCTACCGA AGAGCTGTG  
GAGGCGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCATTATT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA  
GGTAGTACAG GGCCAATAAC AGATTTTGG AATTTTCAA ATTCTCTTT GAAGTAAATT TACAGTCAGT AAATGGAAGT  
GGAAAGAGG AATAGAAGAG CATTTCAITG ATTTTTTTT TCTCTGTAC TTACACATCT CATGACCTCA TGTTCOCAGA  
ACTTAACACT TAGTTGGGIT CTAGTAGATA TTTTGGGTG AAAAGATGTT TGCTGTTTG CATTTTGTIC TGTTTGTG  
GCTAGCCTGT GAATCTAGCA TTGTACGTA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGGAAA TGAACITCAA  
TAACATATCC CAG

SEQ ID NO:432: (Length of Sequence = 292 Nucleotides)

TTCACCGTGT TAGCCAGGAC GGTCTCGATC TCCGACCTT GTGATCTGCC CACCTCGGCC TCCCAAAGTG CTGGTATTAC  
AGCGGTGAGC ACCCGCCCG GCCACCATC ACTAATTTTC AAGAAATGTG GAAGTGTCT ATATTINCIT CCCACTCCAT  
AGCTCCAACA TTGTTGGCTA TTATGAATTT GGCTATTAG TGATGCCAAC AATATTTAAT GAAAAAAGA TATAGCAGTA  
TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATCNGTG AGGAAAAGGC CC

SEQ ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTTCTC AGCAGAGGAT TTTATTGGTG GTCACCTGTG GCACAGGTTA GAGGAGCCGA AGTGCTGTNT TTGTGGTGGG  
GGGGGGACCA CAAACCCCG CCTGCCCCC TTGCTTACAT AGGCTTCCCG CCTAGAAGCG CANTATGAAC ATGCCGCTAC  
GGATCCGGTT GTAGTCTGGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCATAGA TGTACTINGA  
GCAGATCTCA CGTACCACAC TGGCATCCAC CTCGCAAAT CCGCTTTCC CATTCAGCCA GGGGGGNATG CGGNGGGCC  
ATAGGTCAGG AGGCT

SEQ ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATTGGA GATGACGTGT ACCCATCCTC TAGACAGTCT GTGCTTTTCC TGTCTTTGGA GCTTCCAGTT  
CCACCCCAT CAGTTTTTTT CTGACCACTC CATCTGCCT TATTTCTCTC TCTTCTTT TGACTGGAAG AGTACTCATC  
TTTTCTAACA TCTTTTATA AACTGTTTTG ATTTCACTTA TATTGATTTT NAAGTATAA TGTGCTGGTG TTCTATTTC  
TCAGTTAGAT CAGAAGGCC CTAAAGACAG GGCTCCATTG GTGTAAACT GCCATCTCA AGGTCTGGGA CTTGATTTCN

CTTTTTNAC CTNCACAACA AGGCACTCCT CTGCAACCA GTCGGAATTT CAGTGCCTGT GGGTCAAAGT

SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCTACTAAACA GTAGATTTAT TTTATGTAGA TTTGTTTTTC TATAAAAATA TATTATGTG TTCACAGGAA AAAAGTTGAG  
TTGGTATGTG GGGGTGACTT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCTT AGCTTTTATC  
ATTTTCAAAT TTTTCTTCAT AAAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT  
TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT  
TTGGATTTTC CCAACCCCTG GACAGTTCTC TAGGGACTCA TGCCACCAA CCATCTCTGA GACTATATAC AATCAATTAC  
ATTAAAATGA TATTGACAGT AGACTAG

SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTNTNTAG ACACAGAACA AAGAATCAGA  
ATTGTAAAAA AGANGAAAAA CAAATCTNCG CAGCTGCAAC TTAAAGTAT CACCTTTATA GATGGCAGGG ATTTCCATTA  
TGCAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTAC CACTTGCAGT CTNGTATTTG TGGTGGCCAT  
GTGGTGAGT

SEQ ID NO:437: (Length of Sequence = 404 Nucleotides)

GTCAATCACC CTAATCCCTC TTTCACCTTC ACAGAACTTT CACACTCCAA TGTACTTGCT GTTTGTAGAT GCTCCTATAA  
ACAGAAAGCT CTGGGAGACA GGTGCTTGT TATCTTGCT CTCTGTCATA TCTCTGGCC TATCACAAGT ACTCAAAGCA  
TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GGCGTCAGGA TAACCTAGAC  
AGCTGTTAG CACGNTCAC TGNNNCCAC CCCACAGTT TCAGGTCTGG TCTGGGNTGG GGCCCAATAA TCTGTATTC  
TAAAGTCCC CAAGCAATGC TGGTCTGTT CGTCCAGGGA CCATGCTTAA AGAACCACC GGAATAGGAC TGGTGGACAA  
AAGG

SEQ ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTCCAT TTACTAAAGT CCCAGTATGT GTCAAAGTAG TTTTCATCC TCACAGCCAT GTTATGAGCT  
AAATATCACT AACTTTCCCT TTCAAAGGTG AAATAAACTG AGACTCTCGA AGATTAACTT GCCCAAGTC ACCTAGCTCG  
TTAGGAGGCA CAGGTGGAC TTGAACCCAG TTCTTTCTGA ATTCAAAACC TCCAAAATGT CTGTCACATC AAGCTGCTTC  
AATGAGATGC TAGAAAATCA GGACAGTGAG CAAGCTGGAG ATAANGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC  
ACACACATAC CCTGCAG

SEQ ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGTGTAT GAAGGTAGCC ATTTTGTACA TGTTACCTTG TTA AAAACAA AAGAGCAGCA ACATGTTTAG AGTGGTGTCT  
ATAGATAGAA CACTGCTGTT ATGTTTAAGG AAAATTGGGG CGGGGCAGA AAAGATCAAT ATGACTAGTT AGAAGACTAT  
TAAGGAGAAC TTTGTACATG AATTATGGAT GTAAGAATTA GAAAAAATA GATGATCATG TTCAGAATTT TAGCTTTTTT  
ACAATTGTAG TGGAAAAGAA AACTCCTAGA GTAATGAATC AATGGTATCC TACAAAAGA GAGGTGCCAA AAATACCATG  
AAATATTATA TTA AAAAAT CACACGNATA GGTAGTTATA ATATGTAAAG GCCAGACTTC

SEQ ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTTTTGATG TAATTTTATT TTTGAGAGAG GGTCTTGCTC TGTCACCCAG  
GCTGGAGTGC AATGGGGTGA TCTGGCTCA CTGCAACCTC CGCCTCAGG GCTCCAGTGA TTCTCCTGCC TCAGCTCC  
GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTTTGTG TGTCTGTGGA GACAGGGTTT

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CACCATGTTG CCCAGGCTGG TCTCAAACCTC CTGAACCTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT  
GAGCCACCAT AATAA

SEQ ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATGTGG TTTCTGCTTC AACCTGCATT TCCAGAGGTG CCTGTGGTC TGTAAATGGT TCTGGCATGT TTATAGGTAT  
TACAAAACCA AGTCTTATTT TGCATTTAC AGGATTAAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC  
AAATTATACT CCCATCGCGG ATGGTGGCGT CCCAGGCTTA CAACCTGACC TCTGCCCTCA CGCCCATCGT CACGCGCTCC  
CGGTGCTTCA ACGAGGAGCC CCTGACGCTG GCGGGCTTTC AGCAGGNNCC CGGCCAACCT CAGTGACGTG GTGCAGCTCA  
TCTTCTGGG TGGGACTCCC AATCCCTTT CCCTTT

SEQ ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTTG TATCTTTTTC TATTTATTGA GATAATCAAA TGATTTTTGT CCTCGTCTT ATTGATGTGA TGTATTATGA  
TCATGTTTAT TGATTGTCAT ATGGTGAGCC ATCCTGTGAT TCCTGGTATA AATGCCACCT GATCATGGTA TATNATCTTT  
TINAATGCT ATTGGATTG GTTGCCAGT ATTTGTGTGA GAATTTTTTC ATCTGTGCT ATTACGGATA TTGGCCTGTA  
GTTTTTTTG CTGTGTCTT CTTTGGTTT GATATCAGGA TAATGCTAGC TTGTAGAAT GAGTNAGGGA GGAGTTATCT  
ACTCTTCAAT TTTTGGGAAC AGTTGCAGAA CTGTTGTGTG TTTTAGAACA G

SEQ ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAATGCCT TTATTTTTTN ATTTCCCATC CAGAAACCCC AGTGTGATGG TGGAAGCAGC ATGAAAACAA CATCTCCCA  
GGCCTCGCAG TAGAGGCGAA GGAACAGAG CTGCCCATGT GCCTGTNICT AAAGACGCCA CCTCAGGTT GATGTACCT  
GTGGGAGACC GGGTCCACCT ACAGACACCA GGTGATGGTC CACCAGCCCC CAAGCTCCAG CTGTCTGAGT CCCCAGACA  
CAGGCTCATT AAATAGCTTC GTACAAAAC CCAAGGGTGT CCTCCAGCT GGTAAAAAAT TGGGCAATTT CTACTTGGAG  
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTTA AGTACATAGG TCATTATTAA AACACTGATT TTTTTTTTAA ATATATACAC ACAAACCTTA GTTCAGCAAG  
GCTTCATGAT ATACACCAAT TCCAAAATAA AACAATCAAA TGGTCCAGGT GTAGAATGCC AGATTCTTT TATCATCTGC  
GAGGAAAAGA GAAGCAGGAT GAGGAAGAGT GAGGGAAGGC GGGGACAGGC TCTGCCAGA NGAGCTGCCG CCTCCTGGCA  
CAGCAAACGC TCCAGGCTG GGCCTGTTC ATATCTGGAG TCGGAGGGAG ACTCCCATCG GCGCTTTGG GACTGAAAGG  
CCCAAGGCTG TCACCAGGTC CCGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGGT GAGAAATAAA TTGCTGTGT TTATAAGTA ACCTGTTTAT GTTATTTTTT TATAGAAGCC TGATCAGAAT  
AAGACAATAT TGGATAGAAT ATTCAGGAAT GTCTTGCTC CAATGTTGGC CCCCCTGTAC TGAGCTCTAA TCTACACTCA  
CCTAAAAAT TATAAATCA TAATAAACT GAAAAAGTCA AACTCTCAAT TGCATCCAG CACAAATATC ACAGNTGNTT  
ATTTAAAAA TTATGTCAAG GCCTAAAAA GCTAAATCC NCAGNTCTGC TAATATTCT CT

SEQ ID NO:446: (Length of Sequence = 367 Nucleotides)

ATATATATAT ATACACACAC ACACATACAT ACATACATAC ATATACATAA CCTGTMTGG GTAAGGCTTA TTGACAGAAG  
CCAGATATCT GGTGGAGAT TAGAAGATGG GCAAGGAATT CTATCTCAG AGTTTCAACA CTGGACAAT GTGGAGAGAA  
GTCTCCTGGG AAAATGCAGA TGCCCAATAA CTCCAAAAG AATCAGGGAA GTTGGAGTAT TTTTGAGATT TACAGTGTCT

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TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT  
CTCCTAGGNN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAAACC TTCAGCATTT AGCTAAAGTT ATTTCACAAT TCAATGCTTG TCTTGCACTG TCCTGGTCAT TTAAAACTG  
GTATCTCTTC AATAGCAAAT AGTATCATAA CAGACCACTA AATTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA  
TTAAAAITGG TGTAAATCAC AGGTACAGA ATTCTTATCT GGTAAGAATT CTGACTTTTT TTTTAAAGAA GAAAAATAT  
ATCCAGATCT GTATCCACAT GCTATTTAAA TGCTCAGENC AAAAAGAAGC CACTA

SEQ ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCC ATCAATCAAC TGTGCATAAA GAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA  
AAAATACAAA AACTTAGCA GAGGATTGTA TCCTTTGCCG TTTATTTTGA TGACCATGCC ATCTTCTAAT CCCAGAAAA  
AACTGGAAA ACAGAATAAA TATAATTNC TGATTATNCT TATGTAACAT AAATGAATA TATATATATA TAT

SEQ ID NO:449: (Length of Sequence = 341 Nucleotides)

ACTTCCTTCC TCAGGCTCCT GTACCAATCT TCAATTCACT TGGGATGTCC TAGTCTAAAA CATTATTTC ATTGAAAGG  
AAAAATATCA ATTCTATCT AAATTGGAGT AAGATTCAAT TCAGATGTGT TTATTTACAA AACATAAGTT TGTATTAT  
CTGTGTTTAA TTTGATCCNG GAACATTACA GTAAAGAAC ATTCCATGTA AAGAACCAGG CAACTTGGCC AGGCATGGTG  
GCTCACACCT GNTAACCCCA GCCTTTTGG GAGGGCCAAG GCAGGTGAAT TGGTTGAGAC CAGGNGGTTT AAGACCCAGC  
CTGGGGCAAA TATTGGCGAA A

SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTT GACACAGTT CCAGTCCCTG AAACCTTTAG CTAATCTTTA GCATTCCTTC AATGGTGGGA ATGGCAACA  
GATCACCATA GTATTAAATAC TCTGTGTAAT TTTATCACTA GAATGGTTAA TTTCCATATC ATAGTAGAGC TGTTGCAGAT  
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT  
AAATTAATAA AGTGTGAATA TAACTATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GGGCCGGCTC CTGGGCACCC ACCCAGCTCA TTGCGGAGC GGCTCCCTC CTGGGGTTGA GTGTCTGGG CCTGAGTCTG  
CAGCCTCAGC CATCTGTTCC CCAACTTGAT CTCCCACTGC TAGTTACAAA CAAATCGCCC GGCTTGTCGA AACCTCCTGG  
GCTCAGTCCC CAGTCCCGCG GGGCATCATT TCATTCTTTC CTAGCCGTGA AGGTTCTCC TGAAAAATCT ATTGTTAGTC  
TAATATGAAT TTCTAATAT GTGACTTAAG GCTTTCTCT TGCTGCTTTT AAAATTTCT CTTTGTCTT TGACTTTGAC  
AATTTGGCTA TAATGTATGT TGGAGAGGAC C

SEQ ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATTCTTGCT TTACCTATGG ACTGGCTTAA GCCGTGTGGC ATCCGAGGAA TGTTTCAAAT GTGTCTGTGT  
TTCTCTTAC ATTCCTTATT GTACCTCATT GTTCAATTCA CTTTGTGAAA TTCCACCTAA CATTTAATTA TTTTAAATTT  
CTCCGTATG AAGTTATTTT AAGACACTGG AATAAGTGCA GCTTGTGTTA TAACAGCATA GGATTATAAA CAACCTAAG  
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATTCTGTAGC TGTTAAATA ATAANGAAGA TCCTGCTCTG  
TGTATTGAT ATGGGAAGGC CCCCCAAGT CTACAGTTAA GGG

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SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATTGAAGATA TTATCACAGT GCTGAAGACT GTNCCCTTTA CTGCTGGCAC CGCCAGCGT  
 GGCTCTGGT TTINCTGCGA ACCTGTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTCTCTACC TGATGCTCTT  
 AAAAGATCTT AGAAACCAAC CATACAGACG AGCGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTGAT GATCAGAACT  
 TGGTTCGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGIG CGTGTTCAGG  
 AGGTTTTCTG TTGCGGTAC CCATGATGGC GGGCCINCC ATTGGGCCA ACTTTTCTG GG

SEQ ID NO:454: (Length of Sequence = 391 Nucleotides)

CGCTGCCIG GTGTGACTGG CTGGAGAAAT AAGTTAGGA GAATCTAGAT ATGGTTGAAT TGTATTGCT GCTCAAAATT  
 TGTTCCTTG TGACAACAAC AACACAACA ACAACAACA CAACAACAAC AACAGGTGAA ATTATCTTGA AATACAAAG  
 AACGTCTGTT GGCTCTGAGA GTGAAAAAAG GAATCCTTAA CAGCTTCAGC TTGCACCAAG AGGATTTTTT TTTATCAGCT  
 TCCCTTCATA AGAGAGGATG GAGGATTTG GAAGAGACAG AACCTGGGAG AAATTTTCACT GAGCTGCCAC TTACTGGTTT  
 AACCTACTTC CACAGAAGGA ACCTATTATT GTTNTATTG GGAATTCAGT AAATGTGGGC CATGTAAAGG G

SEQ ID NO:455: (Length of Sequence = 282 Nucleotides)

TTGAGTACTC ATTTGAGGAC TGCAGTCATA GATTTAAAGT GTAATCAGTC AACTCAGTGG AATTACTTTC TCCATTAATC  
 TTAAATTGCT TCAGGACTGT TTCAGCCTAA GCCAGTAGCT GGGTTTACC AAATTTGAAG ATTTINCTAG GAGAGTTTGG  
 CAGAGGAGA GAGGGGCAAA GCGGTGTAAG GCAGTGTTA TAACAGTGGC CCATGGAATT GATCATGGGT AAAGAGAAAA  
 CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAACAAG CA

SEQ ID NO:456: (Length of Sequence = 340 Nucleotides)

CTAATTATG TTTGAGATCT TCAATGAAAT TAGTTACTAA TAITTINGCTT TATTCTTCTC AAAAGATTTA ACATGATAAT  
 TCTGACCTAA TCCAAAAAAA AAAAATTCAT GGGCCACTGT TTTCATGTA ATATGTAAGA NCTCACCTTG ATGTTAAACT  
 CCAACCTTG GCTGAAACAG GTTAATGATC ATTTGTINGTT ATTTATTCT ATAAATAGTT TGAAGTTGGC CAGGCCTGGT  
 GCGTCTCGC TGTGTCTCC AGGGTTGGAG TTCCGTGGCG CAAATCTCGG CTTCAGTGCA AGCTTCCGCC TCCCCGGGT  
 TCACACCATT CTCTCTGCT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCAGAGAT TATCAGTGGG CGGATGACAT TTGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTTC  
 CTACAAGGTA CAGCCTCGA ACTGGCTTCT GTTTCATGC CAGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGCG  
 GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT  
 TGCCAGCTGC TGCTGAGTCA CAGATTTTAT TATAAATAGC CTCCTAAGG AAAATACACT GAATGCTATT TTTTACTTAA  
 CCATTCTATT TTATAGG

SEQ ID NO:458: (Length of Sequence = 370 Nucleotides)

GTTCCTTC GGAGCTGAAC CAAAGAATGT GCACCCTCTT TCTTAGTGC TGTGGTGTCT GCTATTTTT GTATTTGTGC  
 TTCCATCCA TCTCTGTGA TCACAAGGCA TTCTTAAGT TTCTAGCAC GACTTGCGA CATCCAGACT CGTGGGGGCG  
 CCACCATGG CTCGGTAAGC CAGCAGCCA GGGCACTGGC ACTACCATGA GGCAGTGCAT TAATGTCTG ATACAGCTGT  
 TACCCGACGG CACACACAAG CAGCAGGTCA ACTGCCAAG GGGCCCCAT CACGGTCACC AGGCGTGCC CAGGTGCAA  
 AGGAGGAAAA ACAAAATTCC TGGTTCCGT GTGGGACAGT AAAGCAGATG

SEQ ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTTTCCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTTTTC ATCAGAGCCC  
AAGGGAGAGG GGCCAGGGTA AAAGAGACGA GACTGTAGAG AGGCATAGAG AGACCAGTAG GAAGAGGGTG GGAGAGGGCA  
CTTATTTCTC TCTGTCTCTC CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTNGA  
TGAGAAATGA CACTGGAAGG AACATCAAAG CCGCAGCTAC AAAAGAAAG TCATCAAGCC CCAAATAGAA GGGGGAGCCT  
CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCTTTTGC ACTGCAAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA  
GTGAAAGGGA ACCAGGCTCT ACCACTTGAA ATAAGGAGTA TCAAGGAACT TGTGGACAGC TTTTAAACT ACCACTGGCA  
ACTAGGTCTT GAGGTGGATA AATGAAGAAA TTGGGGAAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA  
TTCATTAGGT GTGAAATAAT GAAGTGATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA  
CTATCACTCA ATTTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCACT GTTGCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCATTAAGA AGCCTTTATT GGGTTATATT CAATTTGACC TCCACCAAA TTAAGCGGA AAAACAAAA AAATAAGAAA  
TCCCAATAAA AGAGCCCCTC AAGATTTCAT AAACACAAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTCAG  
AGCTGTATAA TACAAAAATT CCTGTAATTT AAGCAGATGT TTCTCTACT GATGACAAAT CTCCAACAC AATGTGAAGT  
TATGCTACTT GGGATATTTG TAGGCAAAAC CATTTTTTTT TTGTACAAA ACAAAAGCAA GGGACCNITG AAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCTTN CCTCGTGGG GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAACAAAA  
ATATGTNAGT TAACACAGAG TGTGGAGGG TGTACAGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA  
AGAGGGCATT CTGGAAGGC CTAGGANGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC  
AGAGGNAGNC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTCTTCT GAGGGTCCGC TGCTGGCAGT  
ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCGCCCCAC CCGCCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG  
CAAGGTTACG TTATATATAG GATTCGTGTT CCGCGTGGTG GCGAAAACG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA  
GCCTGTCCAT CATGGTGTTA ACCAGCTAAA GTTTGCTCGA AGCCTTCAGT CCGTTCGAGA GGAGCGAGCT GGACGNCAT  
GTGGGGCTCT TGAGAGTCTT GAATCTTAC TNGGGTTTGG TGAAGATTTC ACATACAAAT TTTTGA

SEQ ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCCGTG GGCTGTGGGC GTCGCTGAA CGTACCAGGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG  
AGGCAGGGAG CCGGGGAAGT GGGGTGGGT CCGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGCTCCCT  
CAGGCTGTCA CTCTTAATCA TCATGTCAT ATCTCTGGGG CGTGTGATC ACCATCAACG ACGTGTCCCC CAAGCTGCAG  
AGGACGCAAA TCCAGCTCTC CAAGAGGCTC TGTGGCCCT CTCACATGG GCTTNAAGGT CAAGGGTTGG GGGCACGTTT  
GGACCGNCCT TCCTGNCCTT TINGAAGAAG ATCTCCAAN GTNCCGGCT TCAGCTTCTT CCGGGCCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)



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GACGACATTT ATTCCCTTTTC CAAATGTTAC AGTAAACCA GGTGAAGAG AATGGTTTGA GCAGTTAGAA AAAAAAAAAA  
 AGTACAAATC TGGGGTTTGG CCATTAAAAG TTATTTACAA CAGTGGGAGA AAAAAAGNCA AGAAGTTGTT TCACATTACA  
 GACCTCCCCC CACCCCAAAG CTAATACTT GCTTACCAAG TCAAAAAGA GACACAGTTG ATTCACAGGC TGGAGGTTTG  
 AACTTGAGTA AGACATTTAT AAAAACCTAG ACGGGGCACT GTCCINCCA GCCCAGGTGC CACTTAGGCC AGCACAAGGG

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATTGTATTT CCTTCCTCA AATTAAATAC CTACCAAAAA ATGGAAGA ATTTTACATG CACTTTAAAA TAGTAAATG  
 GAAAGTGAAT TTTTAAAAA TATGCATTAA AAGTTTACTT TAATTTCCAG TGGGACTTCC TTTATGAAAT TTTCATAAC  
 CTCCTCCTGG AGTATTACAA GATCTCCAAC ATCTCATAAA CTAATTGTGA TATTAGTGA ACCATAAGCA AATGTATATT  
 TTTAGTGGAA ATAGATTATG AATGAAAGCC AAGCACCTTA CTTTAAAGCC AAAATATGAG ATTTTCCATT AAAAACCAT  
 GTCCATAAT AGGGAGGGGG GTTTTTTAAT TT

SEQ ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGGCAA AAAATAAATA AATAAAATA AATACCATT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT  
 GTTGAATTA CTACGCTAG AATTAGAAT AACTACTATG ATTAAAAGA AAAAGGCTTT AATGGATAAA ATAGATAGCT  
 CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACACGNC  
 AAGCGTTAGG GATCAAAAC ACTGTACAA AAATTAAGAN TCCCTTTTAT GGGCTTNTTA ATAGNCTNGG ATACAGGTAA  
 GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEQ ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTTTTATT CATAAAGTCA  
 CATTTATCAT GTAGAAGTCT GTTAAAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAATTCCTT  
 GAGGAAGCAT CTGCTCGTA GCTCTTTATC TTTCTATTTC CTAATACAGG GACAATGTAT ATGGAAGAT AATGTGTGT  
 AGGTGTATAA ATTCTCAATA AATATTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTAACTCA TCCTGAGGTA  
 CATTTTATTA TTGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGTA GAATCTGTG TGGAGACGTT CTCCTTCA ATTCAATGGG AAGGNTCTTT TCTGGCATGA NCTCTCGAT  
 GTCTAATGAG CTCTGAGCAC CATCCATAAG CTTTNCACA TTCTTANAT ATAAAAGGTT TCTCTCCACT GTGAAT

SEQ ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTTAC ACGCACAAGT CTGAAATGTG AAGGTTCTT AATGTGGTT TTATGGTTG TGTAAGATTT  
 TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCAG AGAAGAATTT CCTGACAACG TGGCTGAAGT  
 TAGATACAAA TGTTAATATA GAAGANTGCT TTTATTTGAA TTCTAGCAA ATGGTTTTCA ACTACTTTAA ATATGACCNA  
 CTTGAAAGTA TTATCCINT TTTAAACTA CTTTNTATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT  
 TTGAGAAATA AAGCAAGAT TTTTNCNTTA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA  
 GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTINGGAG  
 TCACAAATAT AAAGATGTAT GACTTNATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC  
 AAGCCCCGAA GCATTTCTAAT GTTTACAGCT

SEQ ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATTGTAG TTCAAATACA TAAACTGAAC ATTCAAACAT CTTAAAAATTA AACTTTAGCA ACAAAGTTTA ACATTCAAAC  
AGGAGTATAG TTTACAAGAA ACACCCAGAA AGGTAATTG TTGTCTAATC CAGAATATTG ATAAAGATCA CTTAATGGTG  
AATAAAATAT GTTTAACAG TGGTCTATT CTGGCCAACA TGTTAGTTAT GACCGTGGTT CCATACCTGA GAAGAAATTA  
CTACATAAAT CTTCTCTTAG GCTAAACAAC ANGACTCGGT CTATAATTCA GAGGGGNTAA TCAAAGCACG TAAGGGTACC  
AAAATAAAC TAATCTGATC TTTAG

SEQ ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGAAT TCTGTCTAG GAGACAGTGA GTNCTAAGTA CACTCTGGAC AAGCACCAGA  
CACAGAAGCT GCCTCAGTTT GTGCTCCCC TGCAAAGCAG AGCCTGAGAC AAGGATTTGG GTACAAGGAG TTTCACTCAA  
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGCAATCCA TTTTACTGCT TTATACTTTC CATTAGGTGA  
CTATATTAGT ATATATTAT AATTCCTAGG TCTTTTGT CTCTTATTG TTAATAATTA TAAACTCCAA GCCCATGTG  
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTTCT GGGGACAAT AATACTNTTC TCCCATCAAT GGCAGATGIN  
GGGCTTGINA CATTTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GTGTGCCAC CCAATCTCA TCTAGAATG TAGTTTCCAT AATCCCCACG TCGTGGANGG GACCTGGTGG  
GAGGTAATCG AACCATGGGG GTGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA  
AGGGACTTTT CCCCCCTTTG CTCTGCATT TTCCATGCTG CCACCACGTG AAGAAGGATG TGTTTGCTTC TCCTTCCACC  
ATGATTTAAG TTTTCTNAGG CCTCTCCAGC CATGCTGAAC TGTGAGTCAA TTAACCTCT TTCCTTTAA AATTACCCAG  
TCCAGGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAAATGGA GAATNGGTGT TCAAGTTTCA  
CTCTGGCCTT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCGCTAGG GCGGCGGGG GTGCGGACG CGGGCTAGG GCGGCTCATG TGGCCGCTCA CGGTCCCGCC GNCCTGCTG  
CTGCTGCTGT GCTCAGGCCT GGCGGACAG ACTCTCTTCC AGAACCAGA AGAGGGCTGG CAGCTGTACA CCTCAGCCCA  
GGCCCTTAC GGGAAATGCA TCTNCACGGC CGTATATCCA GCGCAGAGTA CCTGCTCTCG AGATGGCAGG AGTCGGGAGC  
TGCGGCAACT NATGGAGAAG GTNCAGAACG TCTCCAGTC CATGGAGGTC CTTNAGTTNC GGACGTATCG CGACCTCCAG  
TATGTACGG GCATGGAGAC CCTCATTGG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GGTCTCACTC CGTCATCCAA GCTGGAGTGC AGTGGTGCAA TCCTCAACTC ACTGCAACCT CCGCTCCCGG TTTAGTGTAT  
TCTCATGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCCGCTG GGATATAGAA TCTAAGAGTT  
GATGTGGAA AACACGTGAA TCTATTGCGC GCATTNTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTT TTTGACGCTG  
GAGATGAAT TTTAAAAATC CCCTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAACAGCT NTGCATGGCA  
GGCCCGGCAA TAG

SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGTTAAA ATAAGGTAAT ATGAAATAAT CTAATAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATTTA  
AAAAATAGC TACAATTTTA GTTAGAATGT TTCCCTTATG AGAAAGCATT TTCTGCATAA CTTTTAATGT ACTGACCTTT  
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCTTC CCTGTGCTC ACCAGGGCCC ACCCCAAGTC  
CCAGTTTCTC TAGGGGTCT CTCGGGACCC CTTGAATCCC TTNCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG

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GCAGACCACC CTACATNCTC CTGTGTGTGG GGACACTGTC AGGNTGTCTT CCTTGCATTG GNTCTGTCTG AGTTTCTCTAC  
CATGTGNOCA GGATGNGTTC CATAGTCGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGTATC TNCITTAAGA AAAACACTTC TTCAAATCC TACACTATGA AAACTGTCT TCAGGAATTG TTTATTGGT  
CCGTTGATCT AGTGAGGCTG AGTTCTTAAA TCTTTCACCC CCAAGTTAAA AATTGGAGCA ACAAAACAAA ACTCCAGCAA  
GGCATAAATA AGATATTAAA GTGCATATAT ACAATACCAG AAAAGTTTAG ATTGGGAACA GCAAAAATTT CTAGTGCAAA  
AACTGCTTTT GCCAGCAAAG CTCCCTCTCT GGAATCAAAG GGCTACAGTA AAAGTTAAAA TTGGAACAGG NITTAAGCAAT  
GTCTGTCTTT AGTCACAAGT NAATATATGT GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CTAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GTATACATAT  
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAACTTT AAAGTATAAT AAAAAAAAAA AAANTGAAAA GCTTCAGCCA  
GAGGTCAAA TGCTCACAAC TCATTGACCA AAATATCTC ATACCCGINT TAGAGCANGG NGCAGGAAAG CAAAACCATT  
CTTCTTACTG TTCCTGGNA TACAAGTTCC ATGAGGGGAT GCAATTTNIN TCTTGGNCAC TCCTGTGTCC TCAGGTATA  
GG

SEQ ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCCAGAAGC CTGTTCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA  
AACTTCCCAA CAGCAGGGCT TTGGCCAAGC CCTGTINTTC ACAAAATCGC AACACAACAA TCAGATGGCA CCAGGGACTG  
GCAGCTCCAC TGCCGTCAAC TCCTGTCTC CTGAGAGCCT GTCATCCGTC CTGGCTCAG GATTGGAGA GCTTCACCA  
CCAAAAATGG CAAACATCAC CAGCTCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTG GNCAGTTTT ANCAACCNC  
CAAGTACACA GCAGAATAGG TACAAGTCAA CCTACAACT ACTACTTCT

SEQ ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CGCTCTGTG CCCAGGCTGG AGTGCAGTGG CGCAATCCCG GCTCACTGCA ACCTCCGCTT CCCGGTTCA  
AGTGATTCTN CTGCTCGGC CTCCCGAGTA GTTGGGATTA CCGGTGCACA CCACCGCACC CCGCTGATTT TTTGTATTTT  
TGGTAGAGAT GGAGTTTAC CATGGCTGG CTGGTCTGA ACTCTGATC TCAGGTGATC TGCCCGCCTC AGGCTACCAG  
AGTNCITGGG TTACA

SEQ ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGGCCATGT GCTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATTG  
CAAGACCTGA GCTTAACGC ATAATTAGAA CATAATTTN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA  
TCTGCAACCC AATGTCTTA AAAAGAACT TAGGCTTCAC ATTGTGACA TAATTTCTTT TAAATGAAT ATAAATTTT  
ATTTTINATA TTTGTAGAGC ATAGGATGAT TGAAATCCAG TTGTGTTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG  
CCGTACTAC TCTACAGAAC GCGCAATAAG TCA

SEQ ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCATAATTA CATGTTTATA TTCTATTAGT TGTAATTATT  
TTTACCTAT CTTCTCATTA GAATGTTATA CCTATAGAGC AGATAACCATT CCAGTTTAA TTTTGTGCC GACTCTCTAG  
TAAGTACGTG ACCIATTACA GGGAACTTAA AACAAACAAA AAGTCTGCTG AGTCTGGGAT GTTTAAGGA TCGAAGGAAC  
ATGTGGTCC AATTGCTTT CACAGAGGT TACCTCTGCT TTTCTACCGA ATGIGGAATT GCTCCCATGT GGATTTTAA  
GGAATTCAG TCTACCTCA GGGGAAGNC CACATGTAAT GCCAGAGGT T

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SEQ ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGACGC TGTGTCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG  
 ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCTT TCTGAAGCAT TCCAACATCG TCGTCTCCA CGACAGCATC  
 TCCGAGGAGG GCTTCCACTA CCTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA  
 CTACAGCGAG GCTGATGCCA GTCACGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGGTCGTC  
 CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TTGATATTG TGTCTAATC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCTC ATGCTGTAA  
 TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA  
 CAATTATTGG AGCAAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCAG ATCAAGTGAG ACTTTTTTGC  
 TATCATGAGA ACAGCATGGG AAAATCCAC CCCATGATT CAATTACCTC CCACAGGGTC CCTCCAGGG ACATGTGGAG  
 ATTATTACAA TTCAAGATGA GATTGGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAT AATAGAGTTT AGTAATATGG ATGAATATAA GATAAATATT TAAAAAGCAG TTGTATTTTT ATAGCCCAGC  
 AAGATAAAGT TCAAAATATG ATTTTTTATA AAGATGGATT TACAATAACA TCAAAATTA AAATGCACCT TGAAATAATA  
 AAGACATGTA AACCCTTTTA TGANGACAGA TTTTTTAANG CATTTTTTAA AATNCTTTT CATTGACAAA TAATTATCCN  
 TATTINTGGG GTACACAGTA ATGTTTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT  
 CAAACACTTA TCATTTCTNT GTGTAGGGG CCATTCAACA TCCTGCTTCT GGCTA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACCTGATTA ATGATTGGNT TAACAGTATA TAAACAAGGG CCATGGTTTT TTTTACTAAA GTAGGTCTGA AAGATCAATA  
 TAAATACTAA TGGGGGCAGG GAGGAGTGTT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGCTCTGTC CTATTATTAT  
 AATTGTGAAA AATCTTAAAG ACGCAGTGAT TCGAGTTTTT GTAACCTCAA TGATGTGTTA GAGGACAATG CATCTTGGTT  
 TGAAGAATTT GCTGTATCCG AAGGCCGGA AAGTACTCGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCTTAA  
 CCG

SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCTTTTA CTCGATCAT AATCTCCAC CTGCTAAGA GGTATTTTAT TCCTTATTTA GAGGGCCTCT ATTGCCATGT  
 GCCTGGAATT ATTATATGCT CATCACTTTA TGAAGAATAA AATTGTCTT TCCTGCTTTA AAGTTACATT CGTCTTCCG  
 CTCAAATCCT GATCTGGTCC ATTAAAGAGT GTTCGCAGAC AAAGTTCTG AAAGATTAGA GAAGAATCCC CCCCAAGATT  
 GCCCCAACAC TGAACACAG ACAAACTTA TTTTATTTAA ATAAGNGAC AGCTTTCTAA AAGTATACAT TCCTCTAATA  
 AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACCTGCAA GTTTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTCTC ATCTGTATTC  
 CCTTTCTGCT AATTATTTTC TTTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAG CTACAAAAAT  
 ACTTAATATT TTAATTTGAA CTCGCT

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

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CCTGTACTTG TGTCCCTCA TTCACCTAAT TATGATACTT GCTTGGCATC TTGCAGGTTT CTGATGCTGT TACCCAGTAA  
 TAGACCAAGT GCAGACAGAA TTTCATTCTT GCTTTATTAA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA  
 ATTAATTTNT GGCAACAAGC TACTATATTG GCTTGCATGT CACTTTCACC TCTCTGGGCA TTAGTTTNTT CTAATATTTA  
 TAAAAGAAGG ACATGACTTT CTAAGGTTCC TTGCAGTAAT TATGCAGTTC TATTCTAATA GATGCTTAAG CATAAAACCC  
 ATTTTAATAC TGTCCCAAGG ATCCAGG

SEQ ID NO:492: (Length of Sequence = 320 Nucleotides)

GAATTTGGNT CCAAAGTTTG GACATTGCAT TTCATTAAATA CGTCCCTTAA GTTTATTTTA ATCTGTATTT TCCTCTCTCC  
 TTTTGTGTTT TTGTAAATCT CTTTTTGCTG TTGTTTTCGG TTAAAGAAAC CATGTTTTTT TGTCTCTGTG AGTGGCTCCT  
 GTTCAGAATT TTAGTGATTT CATCTGCTGG TATCATTTAG CATGTTGCTC TGTCCGCCGT AGTACTTTAA ACTAGACGTT  
 AGATCTAGAG ATGTGATCTA CTTCGGTAGG ACTTTGTCAA GAATACTTGT AAGTAGGTAT TTAGGTACCA GGGGNCACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTTT GCTGGAACAT TATCAGATGG CTAGGGAAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA  
 GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCCGG CATCCATGGC CTGGCTCATG GTATCATTTG TGGACTGACC  
 AGTGTATATA CTTCGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTGAG CGGTTTCATA TCTGGCCTTG GAAAAGGGCT  
 TGTGTGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTTGCATCAG AAACAGNCCA GGCGGTGAGA GACACAGNCA  
 CACTTCAGCG GCCCCAGGN

SEQ ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCCTT GGAAGTAAT TAGGATTAGA TAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA  
 GGAAGAGAGA CTTGAGCTGA CACGCATGTA CTTCCTCTCT TGCTATGTGG TGCCCTCAGC CATGTTAGGG CACAGCAAGA  
 AGGCCCTCAC CAGATATTGG GGTGGTCTTN GACCTCCAC CCTCCAGAAC TGTAAGAAAT AGATTTTTTT ATATATTACC  
 CAGTCTATGA TATTCTGTTA CGGNAACAGN AAACAGACTA AGACAAGCTT CTTAAACAAA TTGANAATAG AGTTTTAAGA  
 TNCAGACTTT CATTCGCTTT AACAGGGGCC AAGAATATCT ATTTCA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGGTGGCC CGCTGGCGT CGGTGGCTC CGCTCTGTCT CGCAGCCCTT GTGGTCAGAG  
 CTGGATACAA GATTCAAGAC CCTTCNTTGT CTGTINACCC GCTCCAGGTT GGAGCCACAG ACACCCACCG CCACCCCGGC  
 TGGGTCTGCT TCCTTTCTCT TGCCTTTCCC TCCAGATGC GGCTCAGAC CTAGAAGCTC AACCCCTTA TGAGGGCCAC  
 GTCTGGGGT AGCTCTGAC CTNCGACCTT ATGTCCAAAT TTCACACCCA TGGTTTTTCA TTTGACCCGG CCCCTTCTCG  
 CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTTAGTA AATGCAATTT TCGAACAGGC CCCATCTTC AACTGGTATA GCATCTTCCA CACCTGTAG CCTTCAAACA  
 TCACCTGTGA AAATACAGCC CATTCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGAACC CTGACAGTGA  
 CGGACTTTAA GCTGTACTTC AAAAATGTGG AGAGGGACCC GCATTTTATC CTTGATGTTT CCCTTGGAGT GATCAGCAGA  
 GTGGAGAAGA TTGTGNCAC AGAGCCATGG AGACAATTCC TTGGGTATAG AGATAGTGTG CAAGGATATG AGGAACCTTG  
 GGCTTGCTTA TAAAACAGGA AG

SEQ ID NO:497: (Length of Sequence = 273 Nucleotides)

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GATTTATTAA GTATCCCCGA AAATATAAAC ACAAACCAGT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT  
 AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGGCAAGGGA  
 GCCCTAGGGC GAGGGGAAAG CAGGGTGTGG GCAGCGAGAT GGTCCNGGG GTTTAGACAC TGCTGGCTTC GGNCCCGGCC  
 GGCACCANGA CTCTCACTTC CAGCTGCGAG CAG

SEQ ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCCAAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTTCT CAGGTACAGC CTGAGAGTAT GCAGATATAA  
 TACACCACAG ATGATTCTCT CCTTTTITG TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GAATCTCATT CTGTCAACCA  
 GGTGGAGTG CAGTGGGCTG ATCTCGGCTC ANTACTTCTC CCGCTCCNG GNTCAAGCA ATTCTCTGCT CTNAGCCTCC  
 CGAGTAGCTG GGNCTACAGG NGCACACCAC CATGCCCATC CAATTTTTGG ATTTTAAGTA TAGTTGGGGT TTCACCATT

SEQ ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGTGAAT GACGAGTGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAAACCTGC  
 ACATTGTGAC ATGTACTCTA GAACTTAAAG TATAATAATA AAAAAAGAGA ACCTTTAAAA AAAAATAGAC TGCCAGATAG  
 ACTAATAAAT AAAAAAGAGA GGTGAAATA ATCATAAATG ACTAAGGGGA TGTACCCCA CAGAACTACA AAAAACAAAC  
 AAAAAACCT CAGAGACTAC TAAACACTC CTATGCACAC AAAGTAGAAA ACCTAGAAGA AATGGGTAAA TTTCTGAAAA  
 CATACANCA CCGAAGATTG AACGAGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG  
 TAATAAAA

SEQ ID NO:500: (Length of Sequence = 474 Nucleotides)

TTTTATTTTT TTCACGTGTA CTGTTTTTNA TCTTTGATTG ATAAAAATGA AAATGCCAAA ATGAGGGTTA GCTTAATTTA  
 AAGTATAAGC GTAGTTAGCA GCTTTTNTA ATCACTCCTG TCATTTTAAA AAATAATCCT CATAGGAGTA TAAACAGAGG  
 AAGGAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTTT ACAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA  
 GCTCCTTCGG TGTAACTA CAGGTGTCT CCCCTCCAAA AAAAAGCATC TTTTAGGAAG AAACACCTT AACACTACCT  
 TTAGANGATT GAACTTCCAG GGATAGGTG TTTGAGAGAA TCACCAAAAG CCATTTTTTAA ATGAATTTTT AAATTACGGC  
 TTTCTCATTC CTTATAATAG TGTAGCAGCC ACCTTCCCTC TACTATGGAA CTTTAAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

GTGGTGGCGG GCGCCTGACC TCGTGATCCG CCCGCTCAG CCTCCCAAAG TGTGGGATT ACAGGCGTGA GCACCGCACC  
 CGGCCCTTGT GTACATTTTT ATAAGAGAAT TTTTTTAGCT AGGAGTTCAG AATTTTTTAA GTACCATTG AATGATCTTA  
 ATTTTNCITT CATGACAACA CATTCAAAA TGAATCATGC TTATGTACTA AGAGGGAAAA TGTATTTAAG NTAAGGGTGA  
 GAGACTTAAG TTATAGGTGA CCTTAGAGAC CTAAGGTGAG AGACTTGACA CATGGAAGGA GTACATTAG GGTCTACCTC  
 TACCTCAATT TAGTTAGCGA TTTACTACAA TTTAGAGCT AACAAAGTA AAAATAAA

SEQ ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTTGGAGAT GGAGTCTTGC TCTGTTGCCC AGGCTGGAGT TCAATGGCAC AAATCGGCT CACTGCAACC TCCGCTCCC  
 AGGTTCAAGC AATTTTCTG CCTCAGCTC CCGAGTAGCT GGAATTACAG GCACACGCCA CCATGCCAG CTAATTTTGT  
 TATTTTAGTA GAGACGGGG TTTACCATG TTGGCCAGG TGGTCTCAA CTCTGAACT CAGGTGATCC ACTCCCTCGG  
 CCTCCCAAAG GGTGGGATT GCAGGCGTGA GCACCACGNC CAGCCATGAT CCTTAACTT GTTTTAAGAG GTATAATAAC  
 TGGAAATCAT GATGCTCTT AAGGAATACC AATTGGATG ATTATTGATG TATTTAATTC CATCCATATG NAGTAGAAAC  
 AGTTTTTATT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

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SEQ ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTCCATT TTCAGAGAGC TCCGATGGAA ATTTCTATGA ACTAATCTCTC CTGCACATAC TTTGGTACAA  
 GTGGGCTACT GGAGCCACCT TCCTTCGTTT AATCAAACAG CATTATTATCA GCTTATTTAA TGAACACTAT CCAAGATACT  
 TGGGGGACAG AAATGAAAAG ATGGGGGAGC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA  
 TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCAGAG AATGAGTGTG ACAGCTCCTA CCTGTAAACAG CTCTTCAAGC  
 TCCTGCTGGA AGCGGTCACT CAGCAAATCT ACTAGCTGGC TGCGGGCAAA AGTCCGCCCC GCTGGAGGAA AGTGAATTCC  
 GGGATTATCA GAGCAGGTAG AGGGCATGCG GCCCAGCCCT CAAGCA

SEQ ID NO:504: (Length of Sequence = 248 Nucleotides)

TTGCTCTTCT TTTCTACCAT GGAACGTCC TTCTCAGGGG ATTTTINAGGT CTCGGTGTTC CTGTGTTTCT NAATAGGCAG  
 TTCTCTGCTG TCGGCTAAGG GCTTATCCAG GNCAATATCC AGAGCCCTGT AGGGGTCTGT GGGGTCTTTG TCATCTCTGT  
 CGCTGGGCAG AGCATCTCTA GGCATCTCCT CTGTINAGAT GTCCACCTGC TGGGCAAGGG CGATGTCTTC GTGCTCTCC  
 GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTCG CCAGGCTGTT CTCAAACCTT TGAGCTCAAG CAGTCCTCTC ACCTGTCTCC CAAAGTNCCT GGAATTACAGG  
 CATGAGCGAC TGTCNCTGGC TTAATAAATT TTAAGAGATT TGTGTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT  
 TTATTGACAG ATTTTCTAGG GTCACTACTG ATGACAATCT GNTGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG  
 TTCTGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAGGC CCCTGTAGGC AGTAAGGATG CCAAGGACAG  
 AATAACTGTT CTGGAATGTG CTAATAATGC AGCAGGCAAT CAATAAG

SEQ ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTTTAGCTA TGCCATATCA AAGCCTGAGG AAACAACAG GTCCCCAGAT GAAGAAGATT ATGACTATGA  
 GTCTTATGAG AAGACCACCC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA  
 GTGACAGTGG CTACTCCTAT GAGACCATTG GGAAACTAC CAAGACCCCT GAAGATGGTG ACTATTCTTA TGAAATTATT  
 GAGAAGACCA CACGGACCCC TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAAGACC ACCAGCCCCC CGAAGTGAAG  
 TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG  
 ATGGTTGGCC ACACAACCTT

SEQ ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAACTATT TTACTTAAAA AATATTCTAT TACTTCAATG TCATGTCTGT TGAACGAGGA ACTCAACATG CTTATTINCC  
 TTTGGTTCCT AGAAAAACCC AAGTCTAACC AAATGTATGC CACAAGGAAC TGCCAACCTG GTTAAAGCTT GGTATTTCCT  
 TGGTTATCAC CCTATTTCCT GGTTAGGAC CTGGGGTTTA ATAGAGACAT TTACATAAAA AAGGTATTTG GTTAAACAA  
 GAAATATGCA TGCNCTTCCT TACCACCTTC CTGGGAAAGA ACTGCTTTTT TTNCTTTCTT TCTGTGAATC TTGTTCAAGA  
 CATCTCTGAG TTTAGATATA TGGGCTGCTT CTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA  
 TTCTATAAAA TGGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGTTTAGAA AAAAAAGTGC AGCTCACTGT CAGCACTCAT TGAATTTTGC ATAAACATGC TTTTGGAGGC TGAAGCAAAT  
 CTGACTGATT TTCAATGTGA AAATAAATA TAAANCTGT TTTTAGAGTT ATTTATTAAC AGAACTAACA TCAGAATTAT  
 TTGAATCACC AGAATAATCA ATTCTGGAAA AATCAGATTC ATCAGATTAA TCTTTGGCCA ACAACTGTTC AAGAACAATG  
 TTAACATCTG CATGGCAATG CTACATTINC TAGGATTTGA CATTTTCAGC AATTGAGGAA TTACTATA

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SEQ ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTTTCAC TCTGTGTC CAGGCTGGAG TGCAATGGCA TGATCTGGC TCACCGCAAC CTCGGCTCC  
 CGGGTTCAAG CGATTCTCCT GCTCAGCCT CCCAAGTAGC TGGGATTACA GGCACGGGCC ACCACGGCTG GCTGATTTTN  
 TATTTTGTAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCCGACCT CAAGTAGTCT GCTGCTCA  
 ACCTCCCAA GTGCTGGGAT TACAGGCGTG AGCACTTGGC CTGGCCGTG ACTGATTTTT TTTCATGTAG AATTGTCAAC  
 ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTCGGT TGTGTGCAG

SEQ ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTCTCTCT TACTTTCTTT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCTGCACA  
 CGATATAGAA AAGCCATATT ACTTTCCTAA GACTGGTAAT CCGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA  
 TTGCCCCAAC TTCTCTGCTC ATCATTTCGCC ACTGTTCTGT AAATTTCCCA GTCCCTCAC AGAAAGCACA TGGCACCATT  
 TAAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CCTGTCCCA TAGTGAAGTT CTCACAAAT  
 GGGGAGACTT CTCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTCTCTGC  
 TTGCCCTTTT TCCGCCCTGG GTCAGTATAC AAGCTTTCGG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

AATACCAAAC TGAACAAACC TGCTCTTTC TGGTTAAAC AAAAAAAAAA AAACAAAAC AAACAAACA AAAAAATCAC  
 ACAGTTTAAT AAAGANGCAA CTCTTCTCT TTAGGNGCAA GGACTACCA TCTAATTCCT ATCTATTGAG CCCCCAAAG  
 CTCCCTTCAG AGTCTTCTT CTCTTTATCA ACAGAAAAGT CTAGAATGAN TATTCACAGT TTCTAAGAA AACCAGAAAG  
 CCTTTAAGCA GCATTAGCTG GNCATATTT TGTCTCTAT AGTTACCATA GATGAGTACA GCTTTACACT AGGGGGCTGG  
 GAGTTCAGAC TCACAGCAGA GACTNCTGGG GTAG

SEQ ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGTATATT ACAAAAAAGT TCGTGTACCA AAGTCTTAT TAGACTTTAT TTTGTTTTT TTAATTTTAA AAATTTTTTT  
 TGTTTTTATT TTTATTTTT AAATTINCTC TCCTCGTGGT GACTGTCTG TGATTGTCTC AGTTTCTGGA CCAACAAAC  
 AACTAATAA TTTTAAATCT GAAACAGTGA TTGTCCCTTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TGTACCTGT  
 TAGCAAAAGT GTCACGATC TGCACTCTA CCGAAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCCTGTA  
 ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAAGACAA AAGAGGTATG GAAA

SEQ ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTINCTCTGG TGAATGTCTA ATCAGTGIGA TTCCATAGG CTATACITAC CTTTGGGGG CTA CTGCTGCA  
 ATNATGTTTG GTCAGTATCC TTGCAACAA CAGAGTGACA GATTCTAAAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC  
 ACCAAGGTTT ATGGGCTTGC AAATAAAAAG TCATAACTT CCTGCCCCA CTTACCAAG TGAAATCGAG TTCCTCACAC  
 TTCTGCACAC AGCTCTTTCA GGATCTTCCC TTCCCTTCAA GGCTGTCTGA TGTTCAGTT AATTGTATTG TATTGTATA  
 AAGTGCTGAG TGTGAGTCC TCAAAGAAAT TTACTTTTCT TCTAANGCCC CCTGGGACA AGAAAGTGGC AACCAGGCAA  
 ATGATTGATT ACTTATTTGT TTGAGTATCA CTTGTGATT GTCCAGGGC TGTATTACAC ATA

SEQ ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AAACGTTTCC TGGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC  
 ACGGACCTAT CAGTCTGCTC TGGGGTGGT ACCTGCTGGG TCCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG  
 GAGACAGCTG TAATGTGTGC AGCTGTCAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT



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TTCCCACTGT AAAACCAAAG GCTGCAACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC  
ATTTCCTCCT TTGAGAACCC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTCTGCAAG ACCCTGTGGG TAACTT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAAA TGATTCCACA CACGAGTAAA GAGATTTACC  
AGGAAGAGTC TTGTTTTCTA AAAGTTGATA CAACTAGTAG AAAAATACCT GTTCAGTGGTA AATAGAGCAG AAGTAGAAAA  
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG  
TATGTGTAAT TCATGCAITT NCTGACTCAT TTATTTATAC ATTGATACTG TCACTTATAA ATCAAATCTT ACAGGTCAGG  
TTCTGTGCTA AGCTCAGGGG NTATAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCAGT ATAAGTGGGT  
AGATAGTTCT ATAAAG

SEQ ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TCGAGAACAT CGTAGCGAAC ACGGTGCTAC TCAAGGCCCC GGAAGGTGGC GGTGGAAATC GCAAAGGCAA  
AAGCAAGAAA TGGCGGCAGA TGCTCCAGTT CCTCACATC AGCCAGTGGC AAGAGCTGCG GCTCAGCCTC GAGCGTGACT  
ATCACAGCCT GTGCGAGCGG CANCCATGG GCGCCTGCTG TTCCGAGAGT TCINTGCCAC GAGGCCGGAG CTNAGCCGCT  
GCGTCGCCCT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCGGATNAC AAGCGGAAGG CATGTGGGCG GCANTAACCG  
CAGAATTTTC TNAGNCACAN GGGTCCTGAC CTCATCCTG AGGTTCOC

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGCGCCT GGAGAGCCAG CCTGCGAGG TGGGCTGGGC GAGCCAAACT GCGTTCCTGG TGCAGGGCTT CCGGTCTCCC  
TAACAGACCT TATACGCTGA CCGCGGCGCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGGACGACC ACATTGCTCC  
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG  
AGGAATTTTA GTGGCAGCAT TCGGCTGTG ACGNCACCGA AATTNCCAGG CCACTCCAAG TCAGAAGGGA CCACCAGGAA  
AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTTT TTTGTGACA AGGACTTAGA GGGGTTTGGG TCT

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCTTCTCTGC AGATAGAAGA GCCAGAATGG GAAAAGOGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TTTACAGTGA  
TGGTGTGAA CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG  
TNCTGCTTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCCTGCGCA GCAGCCTACT CCTGGATATT  
TCACTGATGA TCAGACATTA GACTTCCTTC TGCAGATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT  
GACTCTGGGC TCCATTGTTT GGAGTTACCG TGCTCCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTTACTT  
TCAGACCAGA AGTCTGTCTT TCCTCTCTG GGGCCGAAGG CTGTGAGGT TGCATCTTCC CAATT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GGCCGTGGT AACAGAAAAC TCAGTGATA CTTGCTGTT GTTAGGTTGT CAATATAGTC TTTCTGTAGG ATGGATAGCA  
TGTTTGAGAG GTGCCAAACA AGAAGTTTGG GGGTTAGTAG TGTGCTTGT GGAGGGTATT ACAGGACTGT GTAATTATAG  
GACTCTAACT TGACATGGCT TGGCACCAC TTGCAGTAG TGGGTACAGG GTACAAAAGA TGTTAGAGAA AAGCTCTACA  
GATTACGTAC TTCTGTGCT TCGTATGCTC AACACTGTCC TTTGTCTC CATGAAAGAT GAAGGAAGCA AATTTATGTA  
TGINCTTTCT TTGACCTTCT TTAATCCTCT GATACTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

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CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA  
CAATGATGTA CAATTACATC CTAATANTTC ANTGCCCAAG AGCCCTGTAG AACTATTGCA AGGCCAGGN TTATCACAGT  
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGGTTTAAC ATGAGAAGAG TAATCCATGC  
TACAAGACGA GATTTCATTT TACAGCTGTA GTAGCCAAGT GCTTAAAGC TTGANTCTGT CCCA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCTG TCACCCATGC TGGAGTGAG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCCAGGT  
CCAAGTGATT CTCCCGCCTC AGCCTCCCA GCAGCTGGGA TTACAGGCGT GAGTCACCTG CCTCAGCCTC CCACAGTGCT  
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTTGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA  
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTGTGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT  
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTGCTG GTGAGGAAAT TCNTGTAGT TCTGTAGGAA TTTTATAGC TGTGTTGCA TTCAGTTCTA  
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT  
AGGATCAGTC CCAAGAAGAA CTATNGGGTN GGGGAGAGGT TTTTCTTCCA CTTCTTGGN TTCAGTGACT TTGAGATGGA  
CCTCTTTTTT CCNNTGGACA AAATGTCATC ACACCAACAT CTTATTG

SEQ ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTGTCTCT ACTAAAAATA CAAAAATTAG CCGGGCATGG TGTACAGTGT CTGTNATCCC AGCTACTCGG GAGGCTGAGG  
CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTGCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG  
AGCAAACTT TGTCTACAAG TCCTCCTACG CTGACAGGTC CTCCTCACC TGAATCTTTT ACGCCAGCAG CGTCTCTTCA  
CTGACGINCT TCTNCATGCC GGAAATAGGA CCTCCCTTG CCANCGGGCA GTGCTGGCTG CATGCAGTCG TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATTGG AGCCAGGGTT CCAGTTCTCA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA  
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTTGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG  
AAAATTATGA AAGGAGTTTG ATAAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCCTCCTGC TTACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGTG TGGACCTTAA ATTTAAACAG CTAAAGCTAT AGTCTAAGGA CAGTCTCAA TAAATACCTT TGAATTGTCA  
TATGGTGCCC AGGAGGGTCT TGTGGAAGG GTTTCATGGT AGTGAAAGAT GTAATANCTC TTTTTCCTT TTAACCTTAA  
GCCTGTCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGGTCACA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGTTTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTT  
CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCC TCATGGCCGC  
ACCGTCCAGG GGAAGGGCTG TTA AAAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAAGCA GGTCTGCAGG  
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG  
GAGAGATCAG ACAAGGAGTT GTTCCTGAGT TNAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)

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TTTGAGTTT TACATCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTTG TAAGAAATTG TGATTTGGAA  
 GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCCTT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA  
 TCTGAAGGTC TATGGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTCGG AGTTAAAGGA GGATATATCT ATATNCTGGG  
 AGATGAGCTG AATTGAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGTTTAAGC CAAATTAGGC TGGCATCCCC  
 CACCACGGCC AACTAA

SEQ ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTTACTCTA CCGTGAGGAG GGGGCTCCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTACAGAG CACATTGAGT  
 CTGTGGTCAT CGTGGTCTT CTATCTTCAC TGTCACCTGT ATCTGTTCAC ACATACTCAG TTCTAATTG TAAGCTCAAT  
 TTTGGTATTA GCAAAAGCAT CTGTGAGTTT TTCTCAATT ACTCACACCT CTTCTTGCCT AAATAAACA AAGAAACAAA  
 GAAACAAGT GTGGTGTCT TACACGTCCT GGGAGTTCCT CGTCACTGAC TTTATATATA TANAANAAG AATGCACATG  
 CGGGCCACGT TCACAGATAG ACAGATTAC CCGAAATTGA GGAATGAGGG GCCTTAAAGG CTGCCGANAA NCAAAATGGG  
 GTGGAAATTA GCAANCGTTG TTTTCCGGTC AATTNCCAAT TGTGCACTGG CTGCGTTGAG ACAAGNCCAT CTTCCAATTT  
 CC

SEQ ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCCTCCT CGAAGCAGGA ATCCTAGTAA ATCTCATCTG CCGCATGCGA TTCCTAGTGC AGAGAGGGGA  
 CCTGGGTTAT TAGAAAGTCC TTCAATATTT AACTTCACTG CAGATCGATT AATTAAATGGT GTCCGGAGTC CACAAACAAG  
 GCAAGCAGGT CAAACTAGAA CACGATTCA AAACCTTCA GCATATGCCA AGAGAGAGGC TGGGCTGGG CGTGTGGAGC  
 CAGGCAGTCT CGAATCCTCT CTTGGTTTAG GGAGGGGAAG GAAGAATTCC TTGGGCTACC GGAAGAAAAG GGAGGAGAAG  
 TTTACAAGCA GCCAGACACA GTCTTNCAC GNCACCAAG CCTCCGTGCG CAAGCTTTCG AGCTGGGGGC TTTTCCAGCT  
 TTCCCTCCAT TA

SEQ ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTTTTAAAT AATAGTCATT TAAAGTGGT GAGATAATAT CTCATTGTGG TTTTNAATTG CATTTCTCTG ATGCTTAGTG  
 GTGTGAGCA TTTGNCATA TAACNCTGG CCAATTGTAT GTCTTTTTTT TTTTTTTTTT TTTTTTTTGA GATGGAGTCT  
 CACTTTGTCA CCCAGGCTGG AGTGCAGTGG CGCAATCTTG GCTTACTGCA ACCTCCACIT TCIGGGTCA AGTGATTCTC  
 CTGCCTCAG CTCCAAGTA GCTGGGATTA CAGGNGCCA CCACCACGCC CAGCTAATTT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCTTGA CAGTGGGGC AAGTCTACC AACCTGCACA GCACATCCAG CAGGNCAACT GTGGCTCAGC  
 AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCACAGC GTTCAGATG TGTGTGGTCT GAGAGATAAA AGGACACAGA  
 ACAAGATGAC TGTGCAAATA GCCAAGTGGT GGCAGAAGTT CTGCATTTC AAGAGATGAT CCACTCAATA ATTTGACGAT  
 ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCCTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEQ ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACCTC CGACCTTTGG GAGCAGCCAG GGAGGAGTCA CTGTCCAGC CCCTGGCCT AGGCACAAAG GGGTGGGAGA  
 GACAGCTGGG CCAATATGGT CTATTACCGC CTGAAACCCC GCCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCC  
 ACGTCCATGT CCAGGAGCCC CCTTACTGTC CTGGTCATCT GTGGCCCGG GAATAATGGA GGAGATGGTC TGCTCTGTGC  
 TCGACACCTC AAACCTTTG TGAGTATGTG GGGAGGGGCT GTGGGGGAGG AGGGCGTACG GGCTCTGGGA TCT

SEQ ID NO:533: (Length of Sequence = 378 Nucleotides)

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GTAATTCAT GTGGCTGACT GGGTAACAGA TTTGAAGGGT ATCAGAGACC TTCATGTTGT AGCTCATCGC AGTGTATGT  
 TTGTTGCTTG TCTCTGCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC  
 TGAGTCAGGC ACATAGTAGG AATTCAGAAA GATGTTTTG GATGTAACAT TCCTCCTTTT TCCTGGACAA AATGGCCTTT  
 TGTCGGTGTC ATTGTCCTTT CCATAGAGGA GGGGTTGGGG CAGGATTGTN AGATGACTGT GTTTGAATCT TCAGTTAGCT  
 AAGACAAGGA TACGNTTTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

SEQ ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTT GTCCAAGGTT TATCAAATTA ATTGATTTTG GGGGGCAAGA TAAAAATTTT NATTTGATTA ACTTTCTCTA  
 TTGGTTTTTG TTTCAATTT CATTTATTTT TTCTTTTATC TTTATAATGT NCTTACATCT GCTTGGTTTG GGCTGGGCAC  
 AGGGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC  
 TGGCCAACAT GGCAGAACCC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCCTAGC  
 TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGGCAGAGC TTGC

SEQ ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TTCCAAGTCC CCAGGAGGCG TGTAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT  
 TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTTN AAATTCACAA AGATTGTTTG GCTTAATGAT TTCTAAATGT  
 ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAAATGGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT  
 GGGATTGCT TATCTCTTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA  
 ATAGAATGGA GCTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACGG ATTGCTGGAG  
 GAGCTTG:AA ATGTAGTCAG CCGTTTCTTT TGG

SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCTTTAGC GCTGTGATC AAAGAGTTCC AGGCCGGGCG TGGTGGCTCA  
 TGCCTGTAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCAGCAGGT CAGGAGATCA AGACCATCCT AACACGGTGA  
 AACCCCATCT CTAATAAAAA TACAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCTGTAGT CCCAGCTATT TGGGAGGCTG  
 AGGCAGAAGA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCCGCCACCG CGGTGGAGC TCCAGCTTTT  
 TTGTTCCCTT TAGTGAGGGT TAATTTGAG CTTGGCGTAA ATCATGGGTC ATAGCTGTTT TCCTGTGTGA AATTGTTATC  
 CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCGT TTTGGTCACA CTCTCACCTA GGTGAGAAC TGACCAAAAA TGTGGAATTA TTAAACAAAA  
 TGATGGGAAG CCAATGTNCT GAAACTGAGC TCTTGCACTA GGCCCCACA GACCAAAATTA AAATGGAGTC ACTAGTGCTA  
 AATGCTTTGG AGTCAAACAG AAATGTTAAA GAAGATAGAT CCCAAACAG AGCAGTGTTC TATTTTCTC CAGAAAACAG  
 GAGATTCCAG CATAATAAGA AAGTCTCCTC TGTGTAAACC CTTACAAAAA AGTAACCTGA AGTAACCAAT TTTTTT

SEQ ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCTTCATGG GCGTCCTAAC TGTAAACAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT  
 TCATACATTT CACAAATGTT TCAGTATCCT CTCTCCCCG ACCCCAGCAT GAGCTTTAAT TGGATGTATT TATCTTTCA  
 CCAGCATGCC CATGAAGGNG CTAAGGAAAA CATTTACCAA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAATTTTTTC  
 TCTTCTTTT TCATGCTTTT TTTTAAAAA AAAACAGGA GAAAGCGAAT AGAGAGGAAA GAG

SEQ ID NO:539: (Length of Sequence = 362 Nucleotides)

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CATGTCATAG TGGCCTGCTC TCCTAACACA GCACAATTTA GGGCATATTT TCATGATGGT CTATCACTGG ATTACAACAC  
 ATCTCTTCAT TAAAGTCTTG GGAAAGAGGC TTCAACTTIN CTGIGITGAG AAAACTTCAC AGGTGTGTAA AGTTTGATCA  
 GTATGTATAA TATATTINAT TACATATATT TNATTINAT TTTTCATTTT TTTCATACA TAGCAGGTGT ATATACTTAT  
 GGGTATATG AGATAATTTG ATAAAGGCAT GCAATGTGTA ATAATCACAT CAGGGTAAAT GCAGTATCTA TCCATCACCC  
 CAAGCATTTA TCCTTTGTGT TACATACAGT CCAATTACAC TC

SEQ ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAGA TAGTCATCCA  
 AACATGAACA GATGAGAAGG CTGTTTTTCA AGAAGGTGAA AGTGACAGAN TATCAATGA ATCTGAACAC ATGAAGATAC  
 TGAGACACCA GTAGTTCAGC AATAAGTGA GAGAAACTA AGCAAATGAG AAACCTAGGA ACAATTATGC AGCAAAGAAC  
 AACGTGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA ACACCTAAGTA TCACAATCAA ATTCTGATTT GTAAAAATAG  
 AGGTATGGGA AGGGTACANG TATGTTGTGT GGGCAAAATG GTGAGGAGAG CTTAAACCTT CTCTTCCCTT AATGAGGAAT  
 TAAATAATCC CATTA

SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTTC CAGGCCTTCG AAAGGCCATC CTTTGACAC ATGTAAAAAG CTGCTTGTGT GGCCCGTTAT TCCACTGAC  
 CCGTCTGAGT GATCACCCAG GAGCGCGGCG GCAGCAAGCA GAGCTCACCG GATTGGGAC AAGGATTTTA AAGGCAGCTA  
 CAAAGCTGAG CTCTATTTGC TGATGATAGT CTCTGTTCAG CTGTTAAAA TGACTGTCTG ACTCACCATG GTAATTTTNC  
 ACAAATTAAA AACACATTTT GGGTGTGCA ACAGTGGTTC TCATCTTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT  
 ACAGGGAATT GGGACTCTCG G

SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TTGTTGTTTC CTACCTTAAC CAATACCTCC TGGAAAAAG AGGTATTGTT ATAAAAATA ACCATACCCA AACATTCCCA  
 CAACATGACC TTAATAAGCT GGTGCACAGT AGATTATGTC AGAGGAAAGA AAATTGACTT TAGAATTAGA GAAACTTAGG  
 TTCAAATCTC AGCTCTGICA TGCTTTGGTT GACCTTCAGT AAGTCCCAT TNCCTCATCT GTAAAAATGG AATAACATCT  
 ACTCCACAGC ATCATTAGAA AGATTAAATA GTGGCTGGGC ATGGTGGCTC ATGNCGTGTA TCCAGCACT TTTGGGGAGG  
 CTGAGGTGGG GCGG

SEQ ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTGTTTTC AATTGACAAC ACCTCATTAA TTGTAAGCCC AGTGACACTG CTGCTGTTT CAAGTCACCT TTAAATTACA  
 CAGTGCTAC TTAATCTTAA AAGCAAAAT AAACATTGGA CTGGTTTACA TTTCAAGCTA CAATATGGAA CCATTGTATT  
 TGGAGGAATG AGTTTAATAT GCATTGTAAA ATAAATTAG GGGTACTTT GCATTACAG CGGCTTATGT AATTAGGTTT  
 AGTCAACTGT AATGTTTCAG GTTAATGTCT TCCATGGATG TATGCTGTGT AAATAGTGAA CTTACATATC CCTTAATACA  
 TCTGAATTAT TACATAAATC CTTAATATTA

SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTTGAG ATCGGGGTC ACCGTGAGT CGCTGGACCC AAGGGGGAAG CGTCTTGATT CCTGGAGGAA  
 ATCTCCGAAG TGATGTGTAA CCTGTGTGT CGCTGCACT TCGCCGCAA CTGCCTTTGG TTCAGTCCCC TGTTCCGTGA  
 GGAGGCGGGG ATCATGTAAC AGTGGAGCAC ATCGCTCCCG GCTTGGACGC CTTTACCTT TAAGTGTTC TGATTTAGTT  
 TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAACTAGC TTTTAAAGCC AGGTTCCCTGA ATTGGGTAGG CATGGACACT  
 CCCAGTAG

SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCGCGGCAC TGGGAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTTT CAGTGTATGC CCTTTTCGAA  
GTGTTAAACT TTTTTTTTTT TTTTGTGAGA CAGNTCTCA CTCGTGTCG CTGCTGGAGT GCAATGGTGA GATCGTAAC  
CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA  
CCATACCTGG NTAAATNTTA AAGTTTTTGT AAAGATGGGG GTTTCCGAT GTTCCCAAG CTAGTCTCAA ACTNCTGGGC  
TCAAGTGATT TGCCACCTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTTTG GGAGGCTTGA GGCGGAGGN TCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC  
AGTGAGACCC CTATNCTAT TTNATTTAAA AAAAAAAAAA AAAGGGGGTC ACGTTTACTG CCACCATCCC AGGCAGAAAG  
ATGAAGCCTA GAGCCTCTCA CTGCTTCTTA GTGGGTCTTG GGTGTAAATT TGCTGTCTTG GGTATATTTT TTGGCAGAAA  
GCATCTGGCA TCAGGCACTG GTTCTCAAAG TCGGGCCCC

SEQ ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAGAGTT TCACATAGTG GCTCAGTCCA GCCTGTGGG GATCTTGCG GGGCTGGGG CCGGTGGTCC GGGGCCTAGG  
GGGATGCCIN ACCAACAGAG GCTCTNCAG CTCTGAAGAT AAGCTGAGGG CAACAGTGA CAGAGGGGGC TGAACCTGCC  
TCAAGGAGGC TCTTATTCAA GAGCAAGTCT TGCTGGCTTC TNCAGAGCT GGGGACCACG TGGCCCTTTG GCCAGCCAGG  
ACCAGCAGCN CTNACCACCT GCTGAGGGGC AGTTTGGGTC AGGGGGNCA CATAGAGG

SEQ ID NO:548: (Length of Sequence = 311 Nucleotides)

GAGACAGGGC TGTTTCTGC ACTACACTGG TCATCTGACC AGTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAAACA  
GCAGTCCACA TACAAGTTTA AAAGGGGCC TGTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC  
CAAATATTTC CAGTTTATCT TACGGCTGGA CTCTATTCT CCCACACTGT TTCTAAAGA AGGTCCACAT TATTTTGGNT  
ACTAGCCTAG TTTAAGTGA GATACTGTGG GCACTTNA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEQ ID NO:549: (Length of Sequence = 387 Nucleotides)

TTTATTTTGG TGTAAGACA GGAAGCTGGA AAATACACTG TATTTAAAT TTNCTTGGTT CCCCCACACA TTGTGGAAC  
CCCCCCCC CAGAGCTAAT CTGTTCAAAC TCAATACIT AAAAATTACA GCAGCCAAAC AAAAGCATGG GGGAAAAAAA  
AACAAAAACA AAAACCAGAT GGAGAAGGTA GCCTGGGCCA GTAGTGTAC TTGGTGTGGA CGACTGAGGT GCTGAACAGG  
AGCTTCTGTT TCTGTTTTTT TCTTTCTTT CCTCTTTCT CTTCAGAGAG GGGATCTNGA AGTAGCTGGG TGTGTCCAGT  
TTCATGAAG CTGCTTCAAT AGCTTGGCTG AAGGAATTTT GAAACTNGG CACAGGAACA CGGGTTT

SEQ ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCCAAC TCTTCACCA GTAGGGGCC TGGCTTGCAA TTGCAGAAGA GCTTCCCAT CCTGGGTGA GCATACCTAC  
TGGTAGTGGC TCGTGATTG CCTGGGGAGG GGCTCCAGA GGTAAACCAAC CAACCTGTG CTACTGCTAT GACCACAGTT  
CTGCTTCTGC TGCCCTCAA CTGGGAAGA AACAAAGAG CTGAGGGCTT TACTCAGCT TCTAGCACTA CGCAGTCACC  
ATATAAGAG GAGCCAGTC TCTCTCCTT GTGAACCTT GACCCCCAAC TCTTCACCA GTGGGGCCCC CAGCTTGGGC  
CAGCAGCACA GTGGCCCCA CCCCTAGGCT GAACATTCCA GTAGCAGCTG CTCCGG

SEQ ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTTTNTGG TGAGCCGAGA TCACGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG  
CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCTCTGC GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG

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GCTGTGTCAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCCACT GGGAGGAGGG TCTTCCATGG GGACGGACTT  
CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEQ ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGGCTC TGACCCAGCA CAGCAGCATG  
ACCAATCTTG TCCGCTACGT TCGCCAAGGA CTGINTTGGC TGCGCATCGA TGCCCACTTG TTGTAGTGGG TGTTCTCAGA  
TCTCTAGCAT CACGACCCAT CACTCTACCT CTACCAGGCG ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACGT  
TCTCTTGGT TAGTTTGT TTTATGCTTC TTTTGTATC TGTAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACCT  
AAGGGCAGTG TAGG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAAGGGGA AAAATCACAA TATGTGTTCT AGACAATATT GGTITAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA  
GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTGTCAATGT  
GTCTACCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAACTG CTCTTTGCA AACAAATGA  
AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAA GNGAGAAAAG CAAATCTTTC  
TATTAGTCTC AAGCAAGTCT TCAGATTAC ACACAATCTA ATGGAGGCAT C

SEQ ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTTT TTCAATAAG GCTATTGTAT CAGCCTGINC TCTCGCTGCT AATAACGACA TACCCAAGAC TGGGTAAATT  
ATAAAGGAAA GAGGTTTTAT GGACTCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGGAGG CAAAGGAGAA  
GCAGAGTCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGAGGGGA ACTCCCTTT ATAAAACCAT CAGATCTAGT  
GAGATTTAAT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CTTGCCCTC ATGATTCAAT TACTTCCCAT TAGGTCCCTN  
CCACAATACA T

SEQ ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCAGCC CGGCTAATTT TTTGTATTT TAGTAGAGAT GGGGTTTAC CATGTTGGCC  
AGGATGGTCT CGATTTCCTG ACCTCATGAT CTGCCCCCT CGACCTCCA AAGTGCTGGG ATTACAGCG TGAGCACCGC  
GCCAGCCCA ACACATGGTA TTTCTGTCA TTTTCATTTA GTCTCTGGT TGCTGTGTA TGGTCTCAGG CTTTATTTAC  
ATTTCTCCGA TTAATAACAG ACTTGAACAT TTCAGCACAC TTTTAGGTT ATTGAATAAC CCTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTTGGT GATINCTAAG CTCGTTTN CTTATCTAT ATATATAAT GGTGGTTTT NATTTAGGA TTTTAAGGTT  
ATCCCTAATA AATTTGAGA TGTTTCCAT AGCTAGCCTG TTGAGATCTT TTATATCAA AAGTTAATAT CTGTGGATT  
NIAATCATT TTTCTACATA TTTAACAAG TCATTAGCAA AATATTGAAC AAAACCTGTT ATTCATATCC TTAGATACAG  
AACATCAATA TCCTGAGATA CAGTACATCA TCAAAATGTG GTCCCAAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTTG ATGGCATGGT ACATGTCCTC  
CAGGATGTCT TGCTCAAAGT CCTTGCTCC ATTCACACCT TTCAGATTTT TGGGAACTC CTAGAGACAG GCCAGTAAGT  
TTTTTCCCCT TGTGTCAACA CTAAGCCCC ACCTAAGGAA CTCTTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG  
CGAAAAACC CACTTCCCC CCCCAGTCCC TTTTCTAGGT TTGGGCCAGC CCTTCCTTGA TTCCCTTGA CAGAACCCCA  
TCCATCATGC CCACTGGAAT CCTATGTCC

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SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCCTGTAAT CCTAGCATT TGGGAGGCCA AGGTGGGCAG ATCACCTGAG ATCAGGAGTT  
CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAA ATTAGCTGGG CGTGGTGGTG TGCGCCTATA  
ATCCCAGCTG CTGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTIN CAGTGAGCCA AGACTGCACC  
ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCCG CTGGAGGAGA ACGTGAACCG CGCNTGCTG GAGGAGGGCA GCGTGGAGGC  
GCGCACCATC GAGGACGCCA TTGCAGTGCT CAGGTGGCG GAGGAGGGG CGACCCGCA CCCAGAAAGA CGCATGCGGG  
CAGCCTTCAC AGCCTTINAG GAAGCCAGC TGCCGCGCT CAAACAAGAG AACCCCAACA TGCGGCTNTC GCAGCTGAAA  
CAGCTCTTCA AGAAGGAGTG GCTCCGCTCT CCTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

CAATGTTAT TGGAAGTTAT CTAGAAGGCT CAGTAACCAG AACTTCCTTT CATTCGTCTT TCTTTTTCT TTTTTTTTTT  
CTCTGAGAC AGTCGGCTC TGTCTCCAG GCTGGAGTGC AATGGTGTA TCTCAGCTCA TTGCAACCTC TGCTGCCCGG  
GTTGTGCAA TTCTCTGCC TCAGCTCCC GAGTAGCGG ATTACAGGCA CGTGCCACCA CACCTGGCTA ATTTTTTTTT  
TTTTTTTTTT TTGTATTTTT AGTAGAGCG GGGTTTCAC CATGTGGCC AGGCTAGTTT CAAA

SEQ ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCCAA ATATATCTGT AATTACATTA AGTGCAAGTG AACCAAAACA GTTCAGATAA AAGACAGTAC  
CTATTTCA TA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GTACACATGT CATATTAGGA GGTGTGCAAT  
AAATGATACT TTATTCTGAA GATTAACATA ATTCATACT AAAAGGATCA AGAAGTAGAA TATTAAAAAA NTAGAATGTG  
AATGTTCTG CAAGTTTTGA TAAGAACAAG CCCATAAAT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC  
TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCCTGCGTGC TGTGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGTN AGCACGAGAG  
AAGGCTGAAC TTCATATTT AACAAACCCAC TTTCATGATT ATNATAATCT TCGCATTTAT TTTTTCGGT CTCTTCATGT  
NCTCTAATT TTCTCTGGN TTTTGGTCTT TTGCTTCTC ATTTTATAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTGT GAGAAACAGA AGCTGAATAT CCTGATTGA TTGCCCACAC AGGCGTTCAA TGGCTTAGCA GTGCTAAAGA  
TTTATTTTA TTTTITGGG CTCTGGGCTG ACATTGGAAA TTINCTGAA TGAGAAAAAC CATCTCAAC CACTGTTTTT  
TAACACTGAG TAACITGGA AATTAACTTT TGCCACAGAC TTGAAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG  
GTACAACAAC ATAATATGGT AAATTCATTT CAATAAAAC TAAACTTAA GATGTCAAG CIGCTTTATA TACTTNTGT  
GCTATGAGAA GTCAAAACAG CGCTGTATG CCAAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGTACTGTG TGTTTCATAC ACATGTTCC TTAGTCTTA AAATCTGGCT CATGGGGTAA AACTATTAT AATCTCCATC  
CTCCAGATGA GGAAAGTGAG ACTTAGAGGT TAAGTACATT TTAGGATAAA GTAGGGTATT TCGATAAATG TTTCAAATGT  
GTTCTGCTC TCTGAGGACT AACTCCAG GCTGCTGGG ATACAAAATA CCTTTCTTT ACCATAGGAG CACTTGGGTA  
GAATATTTGC AGAAACAATA AACTGGCTGA TATTTAAAGT TCTCTCAGC TCTGACATTC TATAATTTCA TTGACCTCT



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TTGCATTAA TTATGTTGAT TTTCCTTTCT ACCOCTTGCT TAGCTAAAAA TATACCCCTT CTNIGTCCAT GGACAGGAGG  
ATGGG

SEQ ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACCTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG  
GTCAGAGGCT AGAAGGGGNC TCACAGGNTT GCCTGGGGAA GCCTGGGCCC AAAACCTGGC CCTNGCTCCA GCCCAGAGNA  
CCCACCTGGG CATNAGACTT GGGCAGCGT AGGGGT

SEQ ID NO:566: (Length of Sequence = 275 Nucleotides)

TTGGAAAAA GAGAAAAAA AATTCTGCTT CATTTACGAA TGTTCCTAAA GGAGGCAAGT TTTCACCTGA AAACAAAACA  
TAAAGGCTTA TGTGGATGCA GCCAAATGTT TCTCCATTTA GAAATCATC ATAAAAGGTG GCAGCACTTT TTTTGTCTGT  
TAACTATATT ACTTATAACT GGCTGCACCA ACATTTTCATC TCAATTTTGG GAGTGTCTCT TCTGATCAAT CCTAAAAGCA  
ACACAATCAT TTTAGAGGTT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

CGCTCGINTG TCCCACACAA ATGTTTAAAG AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA  
AAAGATTCCA GTGCCCCIGA AGAGGCTCCC TTCTCCTGT GGGCTCTCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA  
TACCGTCTAT AACCTTAGGG GGNCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
AATGCCACAC CTACTGGTTA CCCTTTGAGG GCATTTCTCC AGACAGAAGC CCCTGAAGC CTAGGTAGGG CAGGATCAGA  
GATACAACCC GTGTTTGCTT CGAAGGGCT

SEQ ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGTAACTT CCCGATTGNN TTTCCTCCGC TCANCCCTTT CCCAGGGCTA TTCTCCTCCC ACCTGCTGCC AGGCCCTTCC  
CTGGCCATCC TGTGTTAAAT GTCATCCCGC CCTACTGTT ATGTTCTCCA CAGCACTGA ACACGACCCA ACATGCCTTT  
TCACTTCAAG GTTTATCTTT CTATTAGTTT TCCCAGAGTC TGCTTCCCTA GTGTCCATCT CCCCTGCTCG AATGCCCTTT  
GAGAGCCAGT GCTTGTAATTT TGGTCCINGT GGTATGGGCC TGGCACATAG TAGGCAGTCA GCAGATATTT ATGGAACAAA  
CAAATGAATT TGTGTGACTA TAGTTCATTG TTCATAGTTC ATTCATAG

SEQ ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCACTTAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCTTAA GTNCTCAATA AATGCTAGCT CAGGGCAGAG  
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATAACCTAA GTACTCAATA AATGCTAGCT  
CAGGGCAGAG CTTTGCATAC CCTAAGTGCT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATAACCTAA GTGCTCAATA  
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCTA  
AGGTGCTC

SEQ ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATTGAAATGG  
CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTTGA AACGCATCCA  
AGTAAAGCAG TAAAATGATC CAAGAGTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AAACAGAACT TCTGGAAATA  
AAAAAAATC ACTACAGGAA TTTTATAATG CAATTGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEQ ID NO:571: (Length of Sequence = 338 Nucleotides)

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AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGGT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT  
TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTC CCTGGAGCCT  
TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAAGGGA CTGTNCIGTT CTNCTGGTC TCTGTAGGAG TTTGAAGGAG  
AAGACTGGCC CCAAAGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACTTACTT GGATAGGGAG AAGGGNCTA  
GGGCGTATCC ACAAACTT

SEQ ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTTCCAG AAGTGACAGC ACAAGTCTGA GTTGCTGTTT GGTCTGGTGA CCTCAGACAC ACTAATTTGA ATTGAAAGCT  
AAGAGTAAA ATTNCTGGT TACAGGCGAG TCATACTCTT GCAAGTAGTT AGCAAAGGGA GGCCCAAATT CTCAAGGTG  
TTGATGGGGA ACTTGCCACT AAGAGAAGGC AGAGAGGTCC CTAGTGGGTA TATTNCTGC CAAGCCACTT GCCAAAGAAG  
AGGAACCACA GAAAGAGAGA CATCATGACC NGGAGAAAAA TGTGACTAGA CATGCTAACC TCCAGGTNTT TATATATGAC  
TTGAGTCTGC TGTAAATGGC AGCAGAAATC CAAAATTGT ATGGGTAGAC CACAA

SEQ ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTITNAG GACGATCAGC ACAAGATCCC CTGCCACTGT  
GGAGCCTGGA ATTGTGCGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGA GTCCCCCTAC CCACAANCTC  
TTCCCTGAAA GNAATNGAGG GGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGGTTGG GGCTGCCGGC TGACCCGGAG  
CCCTGGAGC AGGAGGCTGG GGCAGAGGC CCTAGGCCAA CCCCACCTG GGCACCAGG ACAATCCTCT TCCCCACCAC  
CGGCCCTCAG GCTGGCATCT CTGCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGTT

SEQ ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAATCCCT CCCAGCAATC CAGATTAAIT TAATATGCTT TCTTAACGGC ATTCGGCATT TTTCAITAAA  
GCAAATGAAC GTCCATCCCT CTCTGATAAA TTAGGCGAAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGTT  
GGCTGTTAAA AAAAAAGACA AAAAAAGTA CCGCAATGG CGTTTCAAAG TCTAGACATC TTCATCATCA ACACAAACAT  
TCTCTTCAC AAAGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTTT TTTCTCATT CTTCTTTAC  
CTTCCCTCCA GGCCACCCAA CCCACATTCA GTGGCCCAAG TCACGTGGG TTT

SEQ ID NO:575: (Length of Sequence = 431 Nucleotides)

GCCCCATTG CTTCTTTGC TGCTACCACA ACAAGGIATA TTAGCCCTTG AAATTAAAGA TGTGTCTGTC CCAGTTGTGC  
TTGTCTTAC CTAAATGCAT ACAGTCATAT TCCAAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTATATAC  
ATGAGCTCCC GTGTGTGGAG TGAACATAAT GCAGATATAA AATATTGGG AAAAAATTC ATGTGTACTG AACATGTATA  
GACTTTTTIN CTGTATCA TTTCTAAAT AATACAGAAT AATAACCACT GTTACATAG CATTACATT GTGTTAGGTA  
TTATAAATAA TCTGTACATA ATTTAACTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTITTATAT  
CAAGTACTTG AGGCTCTGC AGATTGTGGT G

SEQ ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAACA GCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CCTGCAAGCG CGCCTGTAAA CAAGTCCCCG  
TGGGGTTTTG GGAGGTGCGC CCACATCTAA GACTGTGCGC CCTGCACTCC CTCTGGATGG CTTGCCGAAT TTGGTCTTCG  
CTGATACCA ATTCTGGAAG GGTGGAGAGA CAGTTGGCTG GACAGCTGCC TGATTGGCC ATGACCCTTC ACGGGTGCTT  
GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGGG CTTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG  
GGACCCTGGC TNCCTGCTCT TNCAGGGCC TTGGTCAATG ACATCACCAC TTTCTAGGA CAGCGTCTTG GGGAGCTACC  
GGAACTTTTCG

SEQ ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAT GGCATATTG AACATAAACT TAGGGCAGAT TTTTACTACT TTTGAAAAA TGTGAAAAA TATTTCTGTA  
TGAAACGTAA AACAACTTTT AATTTTTTTT AGAAGTTGAG AGGATTCTAT TTTGCAAAGC TGTATTATGA AGCTAAAGAA  
TATGATCTTG CTAAAAAGTA AGTACAACT GTAACATGTA TTCTTTTTTT AAAATCAATG CCTTINCTCA TTINCTTCTT  
TGAAATAGGT AAAAATATGT CCTTAGTAGT TCTTCTAAG TGTATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT  
AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGTAATT AGTGTCTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA  
AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CGCTACAGGG GGGGCTGAG GCACTGCAGA AAGTGGGCT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC  
TGCTATATGG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGGTTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT  
CAGAAGAAGC CTGTTTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAAG GCATATAAAG CATATAGACT CTTGAAAGGA  
CACAGTTGTA CTACACCGCA ATGCAAATAC CTGCTTGCAA AATGTTGTGT TGATCTCAGC AAGCTTGCGA AAGGGGAACA  
AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA  
CTCTTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GTGGGCTGTC TCTGGAGTCC ACATTGCTAA ATATTATGCT GCAGTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG  
GCTGTGGCCC ACTCAAATCT CATCTTGAAT TGTAGTTCCC ATAATCCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA  
ACTGAATCAT AGGGCAGTTA TTCTATGCT GTCTCATAA TAGTGAGTTT TCACTATATC TGCTGGTTTT ATAAGGGGCT  
TTCCCCCTN CCTTGTCTCT GCATTTCTCT TTCGGCCAT TATGAGAGGA AGGACATGTT TGCTTCCCCT TCTGCCATGA  
TTGTAAGTTT CCTGAGGCT CTGAGCCAT GCTGAACGT GGAATTTAAT TAAA

SEQ ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTTACTATT AGGAGAGTCA AATCATTTAT TTTCACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG  
GTCGCTGTG AATTCCTGCG AGTGATTGAG AAATTTCTGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG  
GCTTTAGGAG TAAGAGAGAG AAGGTCTGCG TCCATGTTGG GAAAGAATAG ATATGCCAC AATAATTAGT CTATTACTTG  
TTTGAAAAGG GTGATTTCTT CGTCATTTC AAGTATTAA GCAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA  
AGNAACTTCT TACAGIATGA TTCTAAAGG ATTATGGATG CCATTATCCA TTTTGGAGTT GGTATTGAAG CTATC

SEQ ID NO:581: (Length of Sequence = 449 Nucleotides)

CTGCTCCGTG GCTGTTTCAA AGACTGGGCG AAAGGCTGTC CGGAGGGCAG ACCAGGTGCC TTGCCGCAGA GAAAACACCA  
NAGTCTCTG TTCGCTCATA AAGAAGTTTT TGGATGGA GAGAATCCAG ACCATCTTGG GGCAGCCANG CCTTGCCCTT  
CATTTTTACA GAGGTAGCAC AATTGATTCC AACACAAAAC TCCTTCCCCT TTTTAAAATG ATTTCTGTTC TAATGCCATA  
GATCAAAGGC CTCAGAAACC ATGTGTGTGT TCCTCTTTGA AGCAATGACA AGCACTTTAC TTTCACGGTG GTTTTTGT  
TTNCTTATTG CTGTGGAACC TCTTTTGGAG GACGTTAAAG GCGTGTTTTA CTGTTTTTTT TAAGAGTGTG TGATGTGTGT  
TTGTAGGAT TCTTGACAGT GCTGTAATAC AGACGGCAAT GCAATAGCC

SEQ ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTC GACTTGCAG TGGCAGGGTC CCGACAGGG CCGCTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTG  
GACAGTGGCA TGACCGGAGG GAAGTGGCGG CCGAGGGCC TCAGGGGGCT GAGCACGTCC TTGCAGAGGG GCGGGAACGG

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GTNCTGCTGG TAGTGGCCAA ANACCTCGAA AACAATGGGC TNGCTCTTGA TGTACAGGTG GCGTTTATTT TCATGGATTT  
ATACACACTG GAAAAGCCTC T

SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTTAAAGC AGCCATTCCCT GCCAAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG  
GGCTCCAAGT GAGGCTATGG GGTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAAGTAGTG AGCAGCTGA  
GGGACTGCT GGATGTAGTG AGAGCATTGG TACCACTTGG TGTGTTCTGA NNTGCACTAG CTGCAGCAGC TAGTGCAGCN  
AAATTCTGTA ACTGCATTGC ATTCAACCCT CCCATTGGGT GGAGGCTGCT CAGGGTGTG AGGTTCCAG AGGAGGCAGT  
CTGCTGAAGG AGTGCTAAAT ACTNGGTCC AAGAGTATTT AGACCAGCAA GGTTCCTCCA CACAGATGCT GCGCTGATT

SEQ ID NO:584: (Length of Sequence = 441 Nucleotides)

GTGTTTTTA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCCAG TGCCCAGCAC ACAAGAAATG TTCAATAAAA  
TAGGAGGCAT AATTGTCTG TTTGAATACT AGATAACCCT TTTAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTTG  
GAGGAGCCTA GGCAATCTAT TCCAAAATTA AATGTAAGGA AGGTACATGA GTAAGGGATG GAGTAGGCCC TGGACCAACA  
CTAGAGCTCC AAATTTCTTA AAAAGCTTGA GCTTCTTTTA CTGTGGCCAC GCCTATAATG GGAATAAATC TGGTTCTTCA  
AACAGTCCCT CCCCTCTTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGGTTCTG TGNITAGCTC CTCCCCATCT  
TNGACTCTCA TCCCATTCCT TCTTCTCTAC TACCCATTCA G

SEQ ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TTCAGCTATT TNCTGCTTGC AGAGTCCAGT TAACAAAAGT GAGTNTTGT ATAAAGAAAG TNATTTTTTT  
TTTTTAAATT ATTCCAAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCCTG CCTAGGGGTA TCACTTTGCT TTTGGAGCAG  
GAAGTAAGCA CTTTTAAAGG GGGCTTAACA TGAATGGCAC ATGGGGTCCG GGGAAAGTAAG CAAGTGCAGC ATCTACATGT  
TAGTTTGGTA CCTTATCTAC TAGGTAGTCA AGGTGGTGAC TGCCTGINTC TTTGTGGGGC ATGTGTACTT TGGGGTTGTA  
AATTGG

SEQ ID NO:586: (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATNTTTC AAGAAAAAGA GCGGAGAGAG AGAGAGCTGC ATGAAGCATA  
TAAGANCGCT CGGTCCCAGG AGGAGGCAGA GGGGATCCTT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTT  
TCGAACGCTT GGAGATGCCA AAAATCTTGG AAAGAAGCCA TTCAACAGAG CCAAATTTAT CCTCCTCCT GAATGACCCC  
AATCCCATGA AATACCTGCG GCAACAGTCA CTGCCTCCAC CCAAATTCAC TGCCACTGTT GAAACCACCA TTGCTCGTGC  
CAGTNTCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCTNCAAGC AAAACTTGT ACTTCCCAA AGCAAGTGCC  
TATGCTTGAC ANCCAGGCC TTACTTCCCA G

SEQ ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCACCT CAGCCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCAGCTA ATTTGTATT  
TTTTGTAGAG ACAGGGTTTC ACCATGTNGC CCAGGCTGGT CTCAACCTCC TGGGCTCAAG CAATCCTCCT GCCTCGCCT  
CCCAAAGTGC TGGGATTACA GATGTGAGCC ACCGCATCCA GCCCACACC CTCATTTATA CCAATTACCT GCCCAGTAAC  
TGTGGACTTT TGCTTCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTATAGC TTGTACAGC AGTCCCAAAG  
TTCAATATTT CTGCGGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

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AAGAACATTT AAGTAGTTCA TACAAAGAAA TATAAATTGT NCTTAAATAT ATCAAAATAT ACTCACCTCA TTCATAGTAA  
AAGAAATAAA AAACGTGCT CTGATGACAT TTTTCATCTA TGAGATTTAC AAAGNCTAA AAATTGAGAA TATACATTTT  
CTATTGCTT TGGATGGCAA TTGGCAGTA ACTATCAAAA GTATAAATAT CTATACCTT TGAGGTGTCA ATCTCATTTT  
AAAGAATTTA TTCTCAGCT ATGTACATAC ATGTAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GTAATGAATT ATAAGAATCT GAATTGAGAG CTAAAATATC TGGGTGTAG GCCTACTCTG CCACGNTTTT NITATTTGCA  
AATATTAGAG CTGAACTAGA TGACCTCAA GGCTCTAACC AACTCCAAA CCTACAATTC AATGGCTGAC TGATATACAT  
TGTATCTCT TTA AAAACAA TTA AAATCAA AGANGNTAAT AAATGTGTCA TGTATTATAC AACTATTATA CAGTGTGTG  
TGTATATATA TATATINININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTCCATC  
AGACACTTIN CATTTCCAG GTCCATCAGA TGG

SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CTCATATACA TAAAAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA  
TCACGGAAGA GGGCGCCCC AGCTCTCAAT CTTACACAA TCCCTGCACC CAGGGTCACA GAGCATGCGC AGTCCCTCC  
CGCCCACTTC CGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGT  
ATGAGTCTT CCTCGGGGG GCTCGGTGGG TCCTGAGTAT TCTTTGGCG GATTINCTGA TCCGTCTGCT CCAGGTGAGC  
TNGGAAGGC CCCAGGAAA GGCACANAAG GGCTTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTGA ACGTTAATC AATAGAGTTT GGAAGATGA AAACGTTCTA GAGATGAGTG GTGGTGATGC  
CACATAACAA TGTGAGGGTA CTTAATACCA CTGAACGTGA TGTTTAAAT GGCAAAAGG GTAAATTTTA TGTATGTAT  
ATTTTACCAG AATTTTTTTT TTAAAGCTTA CTGCATGGG ACCAAGCGTG GTGGCTCACA CCTGTAATCC CAGCACTTTG  
GGAGGCCNAG GCGGGTGGT CACTTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAAACCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTTTGGTTT CTACCCATCA TCTCTCTC AAAGGAACCA GGGTCTCTG GGGATTGGC TGATGCCAGG GGATGGAGAG  
TGTCAATTGG NCTGAAGG GAGGCTCGCA GCATGTGTGT GGCAGGTCAG ACAGACCCAA GAGCCAGCTT GTGGGGCAT  
CCCTGGCTAC CTTGGGACA CAGTGAGCGC CGAATAAAT AACATCAGGA ATGNTCACA ACGCAATGAG TAAGGGGAAT  
CTGAGTCTAT AGGGATACAG ACCCAGAGGT AAATNGCCAT GGCCACCCAC TTTCTACAG GAGAATGTGA CTAGTTGAGC  
GTAGGAACAT GGAACAAAT GGTAGAGGT GCTGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTTAAT TTAACATTTT TTGAAATTTT ATATGCAGA AGTTGTACAT ATTINCTGTT  
GTGAAATTAG AAAGANTGA CAGGCAAGGA GGGTGGTCTA CAAAGCACTC CATAGATCCA CCATCTGAG ACAATGCTTA  
ATGCTTTGAT GGATTTATTT ATTINATACT TTCTATGCAT ATGCATGTAT TGTATAAATA CGNATGCATG GTTAAATAGA  
AATGGTCTC CTGGGTGTC TGTATATCCA TTTATGTGTG TGAAGTAAAT CCCCAAAGAG GTAGGTTTGC TTTGCTGTA  
GGAGTCTTTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

206

GAACATGGCC GTGAAC TGCT CGGAGATGCG CTTGAACAGC TCCTGGATGG CCGTGCTGTT CCCGATGAAG GTGGAGGACA  
TCTTGAGGCC GCGGGGCGGG ATGTCACACA CGGCCACCTT CACGTTGTTG GGGATCCACT CCACGAAGTA GCTGCTGTTT  
TTGCTCTGGA TGGCCAGCAT CTGCTGCTCC ACCTCCTTCA TGGACATGCG GCCCCGGAAC ACGGTGGCCA CCGTCAAGTA  
GCGGCCGTGG CCGCGGTGCG AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEQ ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAATC CAAATGAAG AGTATTATAC AAGACAACTA GTCAATAGTC TTCAAAGTGT CAAGGTCATG  
AAAAATTGAG GAAGCATCCC AGACTGAAGG GGAATAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTG TGGATTAGAT  
CCTGGAATTG AAAAGAACA TTCAATGAAC AACTGACAAA TTTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG  
TGTTAATCTC CTGGTTTAGA TCATGTCCTA ATGGAATGT TTTGTACTAT TTTTGTGGA CTCTTAAGGA ATGTGGGTGG  
AGGACACGGA TGAGACCTAC TTGCATCGAC AACAAGGCGT TCTACGGACA

SEQ ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCCC TCGAAGGCCT GGAGCAGCCG GCCTGTGACA CCTGAAGCCG  
CCAGCTCGCC ACAGGGGCCA GGGAGCTGGA GATGGCCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTGTGTC  
CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG  
CATTGTTGCT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTC CATCTGCACA TGAAGGACCC  
CCCATACAAG CCTGT

SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCCTGAACA TCACAACTT GGTTCCTACC TACCACACGA GTAGCCAAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT  
CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACCTTAA GTGTGGAAAA GAGTTCAGAT  
CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAACAT CTCTGATCCC TCAGTCCCCA ACCCTGGACG TGTTCATTT  
ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTTA AGGTTCNAAA CCAAATTATT TAATCAGTGT CCCCCAATA  
AAATCACTTA TCCCATTTTA TTGCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

ACCACTACAC AATATATCTA TGTAACAAA CTGCATTCCT ACCCCTTAAA TTCATACAAA TAAAAAAAT TAAAAATAA  
ATAAAGTAGG ACAATCCCC AGATAAATAA ATTAATAAAT AAATAAATAA ATAAATAAAT AAATAACTTT AGCTCTTGCC  
TTCTCCTACA CATAAGTTAA TGCTGATGG GGTAGTGGT TATGCTCTG TAACTATAA TCAGATGTAC TCTTGACCC  
AACTTAGAT GCGATTTTNC GTATACTGGA ATCTTTGCTA CCTGTATATA AACTGTGGAA CTGAAAATGC TGCATTGGGA  
GCAGTCTGAT AGGNTCTGTC CTAAAGGGCT ACTCTGAGGG GCTCTAGGGG CTTCACTTA CAGGCCCCCA GGGAGGACTG  
CT

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAAG TTTGGATTTT NTCCAGATG ACTCCTTGGG TGAATTTTAA ATCAAGTTAT TTCAACCATT TTNCTCATAT  
ATTTCGTGCA TCCCTATTCT GGTATTCAGT GAATACATGG GAGAGGTATG TNATTCTCAG CTCCACAGC CCATAAGTCG  
GGGAACCAAG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTGAT TGAGGGCAAG ACTGATGAAT TGTTCCTCTT  
CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAGAAG TTAACAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG  
GAAGGNGGGA CCTGGGGGAA GAGGTGGGCA TAAAGTGAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

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COGCCCTCCTG GGTTCAGCA ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG GGAFTACAGG CGTGCCTCC ACCACCAGGC  
COGGCTAATT TTGTATTTT NAGTAAAGAT GGGGTTTCTC CATGTTGGCC AGGCTGGTCT TGAAGCTCTG ACCTCAGGTC  
ATCGGCCCGC CTCGGCCTCC CAAAGTGCTG GGATTACAGG CGTGAGCACTN CGCACCCGGC CAGCTGCTTC TATTTTAAATC  
TGAAGTTGGA AACACCTTCC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACTT  
CAAATTTACT TAAGTTAATT AA

SEQ ID NO:601: (Length of Sequence = 319 Nucleotides)

AGTACTATTG TGCCATAAAA AAAAGAATGA GATCCTATCA CTTCGAACAT CTTGGATGGA ACTGGAGGTC ATTATGTTAA  
GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTTCATATT CTCATCATTT TGTGAGAACT GAAAAATTAA ACAATTGANC  
TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGGG GCAGGGAATG GGGAAAGTTA  
ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAGGGT GGCTATGGTC AACATAAATT TATAGTACA

SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCCAAGTG GGACAACTTT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC  
CGTTGTGTTA AATCAGCTGC TGCCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAACTGC  
TGATCCTTCT CATATATATT TATNCITGTA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC  
AAGAAAGCAT TGGCTCAGGT CTTCTGTGAG GAATCTGGAT TGTACCTTT GCTGCAAAA ATTACGGACT GGGGACTCTT  
CAATTAATCT GACA

SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TTTCACCATG TTAGCCAGGA TGGTCTCGAT CTTCTGACCT TGTGATCCGC CTGCTCGGC CTCCCAAAGT GCTTGTATTA  
CAGCGGTGAG CAGCCGCGCC CAGCCAGGAT TATATTTTTT TAAATCAGAG AACTGAGTA CCACCTAAAG GGACTTAAAT  
TATGCAATTG GAATGAACT AAAGTGAATT GAACATTTAG TTTCATTTAG ATTTTATTTT TCCTGCCAAC TGTATATGA  
GAGTTTGAGA GGGAGCCCG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TTCTAGAGTG  
AGTTAAATTT ACCACAGCGG GGCATATATA TGTATATATA TGATACCTNG TTTTATATA GCTCCTTATA GTTTTAAAG  
CACTTTGTAC

SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAT GATGAAAGAA GCAAACTTGG AGCATCAGAA AGGAAGAAAG AACATGATAA AATGAAATA  
TGAGCTCCTA TTATGAACAT CGTATTACCA TTCATTGTGA AACTTAATCG TATATTTATA TATAAGCATC CTTAGAGAT  
GCTGTGGGT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTCCTCAG  
TGATATATAA ATTAANCITC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAANT GTACATACCT  
TTATTTAAAA ACGCTTTTAT TGCTTAAAN AGGCTAAATG GCCCATCTGA GCCATCGGCT TTTTCTCTGG CAGAGGGGG

SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCTTAGA AATCCTACCA CCTCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TCGCTGATGC  
CTTGCTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATGCTGTCA GGAAATGATA ATTTAAATA  
CCCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GGGACATAC TGATTTTTTAC CAATGTGTCT  
ACATACTATA TTAATAAACT TCCTACAAAG TATTGTCCA ATTCAGTTCA TCTGAGGATG TGAAAACACT ACAGTGTACC  
TTAAACATC ACATTCACAA CCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

208

TGCCCTTCCTT TCTTCAATTC GAGACAGCAG TATCAITTAGT GTTGTATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA  
 AATCAAAGTT TACAGTAATA TCAAAGAAGA CTGGGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCTTAAAT  
 TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTTCAGAAAT CTCTGATTTT CCTTCTGTA GTTGTGCAAG  
 CTGTTGATTG TTGTTGCGGG TTTCTACAGC AGGGAATTTT CTGACTATGA ATTTACAGC AGATTCCAGG NTTTTGTCGA  
 TAAGATAGGA TGGNTTGGC NTGGGNCCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCCTT ATAAAGAGTG AAAGCCCTGC CCCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA  
 ATCCACCCAA AAAATGGCCT GCAGGGACAC AGTCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG  
 CCCACACACA GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC  
 AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAGTTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG  
 GGGGGACATT CAACAGTGAG TAGTAGTTTA GGGGAACAG CTGGCACCTC TGGCAGTCGC CTCAGAGGTC AANCCAGCGT  
 NTAGGTTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAAGTCTC CATCAAGTTT CTGCCCTCCC AACGTAATAT GGAAGTCGTT CTGGCTGTAG GACCCAGCT  
 GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAA GGAAGCAATC GATGCTTTCA  
 TCGAGGGTGA GGAGTGAAC AAGGCGAAGG TTGTAGCTAA GGAGTTAGAT CCCAGGTATG AAGACTATGT GGACCAGCAT  
 TATAAAGAGT TCCTCAAGAA TCAGGGCAAA GTGGACTCGC TGGTGGGTGT GGATGTGATA GCTGCTTTGG ACCTGTATGT  
 GGAGCAGGGC CAGTGGGGAC AAGTGCAATG AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG  
 TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGAAGTT GTAGTGAGCC GAGATCATGC CACTGCCTC CAGGTTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAAA  
 GAAAAGAAAA AGCATTTCTG AAAGGAATAA AAAACAAATT GATAACATCC CCTAATCTCT AGTTGTTGGG ATGTAGTATC  
 CTTCAATTTGA TCAGGAAATC ATATGATTGT CCTTAAATTA TTAAGTTGGC AGAATTTGTG TGGTTTCATA ATGATGCTTG  
 TAAGATGATA TTNTAATGGA AATGTTTATG ACTATATCTN TTGTGTTT TTCTGCTGTA TTTGTGTAAG GCTTAAANCT  
 ACCCCCTTTA AAAACAG

SEQ ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GTATTAATCT TGATACTAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA  
 ATTGCAAATA CAATAAAAGT CGTGATTAT GCTTAATGTT TCTGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC  
 CTGGTTGTG TGGTTACAA CTTTTGTGGC TCCAGATGCT AAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC  
 GTGCCCTCT CTCTCCGAA AAGTTTTTTC TACTCCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA  
 AGGAAATGCC TTTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC  
 CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAACTC C

SEQ ID NO:611: (Length of Sequence = 344 Nucleotides)

TTTGGTACAG TAATTAGGTT TGGTTGATTC GGTATGGGG GTATACACGC ACATGCAAAC ACACACAGGG TGTGCGTGTG  
 TGTATAAGG GGCATATACA CATGCACACA TATACACATA TGTATATAG GATGTGTGTA TATGTGTGTA TATATATAGG  
 GTGTGTATGT ATCCTATATA TGTCCATATA CATGTATATG TNGTATATAT ACATGTATAT GTACACATGT GTGCATATGT



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GTACATATAT GTGTATATAT GTATATATCC CACATCTCCA ATTINOCCTAT ACGTATATAC ACACATATAT GTTATATAGG  
GTGTACAGAT ATAGGATATG TGTG

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TTTTCATAGA TGTTAAGGG TTAAATGAGG TAATGCATGT CGAGTGCTCA GCCAACTGAG  
ATTCAGGAAG CGCTCAATAG ATGCTGGCIG TCATTATTAA CTGAGTAAGT AATCCITTTT CCACAGAAGC AGTAGAAGGC  
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTITTTTTG GTTGTTGTG TTGTTTAAAT  
GAACTGAAAT GAGTTTGAGA GATTATATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAAGTTCA ACATTGTCTAT  
TCTACTCCAC TTCCGTATGA GATAAGTATA TGAGGGNGCT TAATTCCTCG NTAAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTTATTTT TGTTGGTGTG GACTTCCTAT GTGGGCTTTT TGGGTGACAC TCCCITAAGG GTTCAGTTTG ACAATTCINA  
GAGTGTCTCT GCAGTTGGAG GCCACCAGAG GTATCTAAGC TCCCTGCTTC CTATTNATA ATCTCCAGC CCCAGCAGGT  
CCACTCCTGG TTCTGTGTG TTTGGCCCGG GCACAATCCC CACTGCTTTG CTAGACGTGC TTTCTGCCAT GTGGCTTTGG  
GCCTAGAGCT TGTGATAAT TGCAGCTTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GTNGGGGNC  
TNAANINCNN GGGTTTTTAA AA

SEQ ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGTGTATT AACATAGCC AGGAGGTGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT  
ATACATACAA TGGAAATATTA TTCAGCTTTA AAAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA  
TGTTTGTCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTTAT ATGAGGAATC TAAAGTAGTC  
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGGTTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTAA TGGCTATAGA  
GTTTCAGATA TGCAATACGN NAATTTCTGG GGGATTCTTT TGCAACACCA ATGTGCACCG TATAATTCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TTCTTTTACT GATTTTTTAA AATGTGTGCA ATATCTTCAG TGAATCTTTA ACAATCTGGG GAACTGTTTT  
CCTCAATTAC CACTTCAGCA ACGTTCATAC GAAATCAAGG CTTGCCCTCA TGTGAGTGTG AGGNTCAACT TTAATCTGAA  
GGTTGTGTT TGTCTCTAAC ATCTTCAGAG TGAGCTTTAG GGATGCCCTGA AGGATGGACA GTACAAGCAA GCAGCTACTT  
CCATGATACA GTGGGAAGAT AAAAAGGCCC ATTCAGTCCA GCGTGACCT GTAAATCCAG CTTGCCCTCC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTTCA GTGCAGATCT CGACTCACTG CAAGCNCOCG CCCCCAGGTT  
CACGCCATTN TCCTGCCCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTNTTATT  
TTTGGTAGAG ACGGGGTTTC ACGGTGTTAG CCAGGATGGT CTCGATCTCC TGACCTCGTG ATCCACCCGC NTGGGGCTCC  
CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GTGGGGGTGC TGGCCACCTC CATTTCITTT GCCTGGGTGG TGGTGACCAC GGCGCCCTTG  
TGTCTTTTCC ATTGGTTACT GAGGACCAAT GCCCTCATGG GCCCAGGCCA CAGGCACCCA CCTGTNAGCC TCACCTGCCA  
CCTCTCTCCA TGTGGCTTN TTGCCCCCTG GGTGCGCTG GCATGGGGG AGCTTATNTC CCGACCAAGG GGCTTGGCCA  
TGINTCCTTC ACAANCCCCA CTCGCCCGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCAGGAG  
CCCTCCACG CACGTGCCAG CCCATCCCAT CATCAGCACT TGGTTTTAAG CTTCAA

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SEQ ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCTGTA  
 GTCCCAGCTA CTTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC  
 ACTGCACTCC AGCATGGGCG ACGGAGCAAG ACTCTGTCTC AAAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTTAGT  
 ATTAGCAGAT ACATATTACT AGGTACCCCC CATGCTCAAT GAAGTGTTGG GNTACTCTNA AAAAGTGTC AATCTTACAG  
 GTGTGACTTC CTCTGGAAC TCAAAATCTT TT

SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAAGC ACCCCACAA GGGGAAGGC CCCAAGTGG CCCTGCCTG TNGTCTCTC TGGCTCCAGA GATGTCTGCA  
 TAGGCCTCAG CTCTCTACTG GCCAATCTCC TCTTCATGGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTCTTGTGT  
 AAGCTTGCTC CCTGAGCCA CAGGTTGCAC ATCTAAACCT CAGCTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT  
 CCTGGGGCAA GCCAGAGCAT CACCTGTCTC CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT  
 AGTGTGTCCA GTATCCAGCA TGGNGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTCTCTCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
 CTTGCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGTCT TCTCCACTAC  
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA  
 TTATCTGCTC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCTGGGAT AATTTTTTGT ATTTTTTAAG  
 TAGGACACGG TTTCACCATG TTTGGCCAGG CTGGTCTTGG AACTTCTTGA GGTGTAAATG ATCTTNCCTC ACCTTNTGCC  
 TTCCCAAGTG CTGGGATTT ACAAGGTTT AAGCCACCG AATCCAT

SEQ ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GGTCTCTGGG GCAGGTGTTT TGGGATCCTG GACAGGAGGG TCAGGTGAT TTTAACCCAG AGAGACCTGA  
 TCTCATCACT GTCCTTTAGA GGGGAGAGAA GTTCGTNCCG GCCAAAGGGG ACCAGTGTGT AGAACTGCTC CTCCAGCTCC  
 TTGGCGATGT CACTGTGGT CCTGGCGTIN ATGGAGCCTA CAGGGGCCCT AGGACCACTG CCCCCNTTGG CAGCGGC

SEQ ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAA CTCTTCAAG GTAAAGCAGG ATGTTGGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA  
 AAGATTAGAA GAATGGCTAA CTAGAATAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC  
 GAGAACTACG TGATGCATGC ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGGG TATCAGTGAT TGAAGATCAA  
 ATAAATG

SEQ ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGGTT TGTTTTATTT AAGTTTAATG TTAATTCCAT GCTGTGTTTC AGTAAGANCA ATACAGATTG TGTATCTGTG  
 GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTGAGCGA GCGAAGGAGG  
 GGAGGAGTGA GGGGAAGGAG GTAGGGGGAG GGGGAAGGAG AAGAAACAAA AGANTTGAAC AGGCATGCAG GCTTTTCCAT  
 ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTTG AACTG

SEQ ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGTTGGC CAGGTCTCGA ACTCCTGGCA TCAGGTGATC CGCCCGTTTC AGCCTCCCAA AGTGCTGGGA TTACAGGCTT  
 GAGCCACCAG GCCTGGCCCG TTAATATGT TATTTTAAA TGCATTAGTA AAAAAAATAA AATTTTAAAT TGCTAGAACA

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TTAAATATCA ATACCCACAT TAATAAAAGC TATTTGGGAG CCTTAATAAT TATCAATGGT GTAAAGGGGT CCTGAGACCA  
 AAAAGTTTGA CTTCACCAGG TGTTTGAACA CTACAGATCC CATCTTGCCC ATGAAGCTTC CCTAGACATC CCCACCCAC  
 CGTGCTCCNT TCTGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GTTCCTAGAT TACTCAAATT TAGTACTCTT CCATCTTTTC TTGTGCTAT TCTTTTAAAA TCACAAGAAG TCCATAACTT  
 AAGTAGGAAT TTGTATAATG TAACCTATTG TGAGTATATT TCCTTACCAG CTCATAAAGA ACTATGTAAA CTTGAATGCA  
 TATTTTINAC ATAAAAATAG CAAAAAATAA AAAANCAAAA AAAAAACAGT ACTGGCCCTAA TACTAGINGA NTTACAGAAT  
 ANGGGTAAAT ANTACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG  
 ATAAGATCTG GAAGAATTCT TTGGATTTC AGACATAGGC TCTGTGCTC TTCCCTTACT TTCTCCCAA CAAATGGCAT  
 CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAAGTGT GGGTGGGATC ACACAAGCAC CCTTNGGCC ATTGCCCTTG  
 GGACTGTGCT AGGTCAGACC TGAAGTCAGC ACAGCATTGG GTCTCACCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGGG AGTCAGGAGT GCTTTGGAAC TGGAGGTTTG CTTTCCACTG ACAACATCCA TATCTNCTGC  
 TAATGCCAAC ATGCTCCCAA GTGTCTTAGT GGGTCCACA AAGTTGATCC AGCCAGAGG AGTTGCAGGG ACAGTCAAGA  
 AACCAGAGGT GCTGCCCACA TCCCCTATC TCCCTTTCC AACTTCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA  
 CCTGAGATAC TACTGTATG GGTCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGGAAT ATGGGTAAAA  
 CAGAGAGATG GCAAGGAGAC AAGCTGTGCC CAGACAGAGG GATGGGAGG

SEQ ID NO:628: (Length of Sequence = 310 Nucleotides)

TTTTTTTTTT TGAGACAAGA GTCTCACTCT ATCACCAGG CTGGAGTGA GTGACATAAT CATGGCTCAA TGCAGCCTCG  
 ACCTCTCAGA CTCAAGTAT CCTCCACCT CAACATCCA AGTAGCTGGG ACTACAGGAG AGCCACCATG CCCAGCTAGT  
 TTTTINACTTT TCTGCAGAGA TGGTGTCTCT CCATGTTGCC CAGGTGGTTC TCGGAAGTCC GGGGCTCCAG CGATCCTCCT  
 GCCTCAGTCT CCCAGAGTGC TGGACCCACA GGCATGAGCC ACCACACTCA GCCCCAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGTGGAAA GGCAAAGAGT ACAAGTGAGC GAGCCCTTTT TGTGATGGCG TTGATCTGTT TACAAGGGGA  
 CTGCCATAAC ACTTTCCATT AGCCCCCACT TCCCAACACT GTTGAGTGT TGCAGTTAAG TTTCCAACAC ATGAATGCTG  
 GGGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATGTGTGGGA AAGGAGGTC TATTTTAACT TAAGTAGCTT  
 GAAAAAGCTC TTCAAGGAGT TGATACAAGA ACTGAGATTT GAATTAGAGG ACOGAGTAAA GTGAAGAATC TCGGGGCAAA  
 GTCCAGGCA GAGGGAAGAG CAGGAAATGA TTCATCAGTA GACTTGCTCT CCCATTCTCG GCAAGGGCTA TTTACATTTT  
 TCTTCCACTC TCTTCTCAG CACATCTCCA CCTGGGTTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA  
 GATTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCCA CTGCTGGGTA TCTACTCAA GGAAATAAG

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TCATTACATC AAAACACAC CTGCACACAT ATNTTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA  
GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTTTINACA TATCAGTAAT TGTTTTATA ATTGTGGT TTATGAAAC ATTGCTATGC ATTTATTAGG AAAAAGTGAA  
TTTCCCAACA GGTGAACGA AAAGNTATTT TAACTATTAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT  
AAAAATGTTT GCATTAAATG ATAAATTCCT CCNGCATTC TGGGCGNGN TCTGGAGGTG G

SEQ ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACTT CAGTATTGGG ACCCATGGGA GGTGGTCTCA CCCTTACCAC AGGACTAAAT CCAAGCTTGC  
CAACTTCTCA ATCTTTGTNC CCTCTGCTA GCAAAGGATT GCTACCCATG TATCATCACC AGCACTTACA TTCTTCCCT  
GCAGCTACTC AAAGTAGTTT CCCACCAAC ATCAGCAATC CTCCTTCAGG CCTGCTTATT GGGGTCAGC CTCCTCGGN  
TCCCCAATT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCCTCT GGAACAAGA  
AAAGACCAT ATCTGCTCA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCCGCA CAGCGCTGTG ACTGCCCAAG ACCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTCAC  
TCAAGGCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNTCCTTCC CTTCAGTCA GTAAGTCCC  
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC  
TGTTCTACCA TCGCTGAGCT GGCAGTGAAT CCACCCGCA AATCCCTTCC CACTNTCCCC TCCCCCTTN CCCAGGCAGG  
GTAGTCTGTT NCCACCTACG ACGTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEQ ID NO:634: (Length of Sequence = 287 Nucleotides)

ATCAGTGGTC TACCACAGNT TAAGTAACGG GTCATATTG GAGTATCACA CATCTCAGTC TTGTAGAAAT TAGGNACAGC  
AATTAGGAGT CATGCACATA TANGAGATGT AATCCACCC TTTGACTATA GCCTACTCTT GTNTTTTACA GAAAAGACTG  
TGGNGGAAGA AAACCTTTA CCTNTTNTT CAGGGAGAAA CTNACANCAC TCANCTGCCT GGCAGTGAAA ATNTGGCATC  
CAGTCCACTT TACCATCAGT GTTAAGGAA ACCATCTCTG GTAAGC

SEQ ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT  
TTCAGGGCTC CCCACCGATA GTNATCGGA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCTCGA CGACTCOGAT  
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCTCCACTT CCATCCTGGG NGTGCCCTC CCCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TCCAAAATGG GCAAAGATC TGAATAAACA TTTCTCCAAA GATATGCAA CAGCCAATAA  
ATACATGAAA AGATGGCCAA CATCATTCAT TATGCATTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCACGTTGCT  
CCCACTAGGN TAGCTACAAT CAACAAAATG GACAGCAAAA AGTGTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT  
TGCTAATGGA AACACAAAAT GATGGAGCTA CCATGAAAA CTGCTTATCA GTTTGACCTC GGAAGTTAA ACACAGAAGT  
ACCACATGAT CCAGCAATTC CACTCCTAGG TATATACCCC AAGGACT

SEQ ID NO:637: (Length of Sequence = 384 Nucleotides)

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TTCATAAAAA TTTTACTTAA AATCTGTAAAC GCTAGATATT GACTATCCTT AGTTGAGTCA CTGAGGTTTA AACACAATGG  
 TAAGTCTTAA AGTCTGCTAT TTACAGAGCA TTGAATCTGT ACCAATTTGC AATAGAAAGC CTTCAGTATG CAAGAAGTTT  
 GCATGGGTAT TAAGAACACA GCTTAAATAA GGCATTTGAT CTAATCTGCA GGAAGAATTT TCTTCCCCAA AACAGAATTA  
 TAAAGCTTA CTTTAAACAG GAGGCAGAAT AATTCTTTTA GGAAACCAAT TCATTCTGTT TCTACTAACC TATACCATCT  
 GAGGAATTCT AGGGAGGATA ATAAAANTCT CGTGTATTCC ACAGCAAAC TACATACCCT AAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTTC ATCAGCTCTT GTTTCCTCTC ATTCTTTTGG ACCTTGTAAGA TTTATCCTTT TTTCTTAATT TATTCTCACT  
 TAATGGGATT TCAGGAGCAT ATTGACTAAG TTTTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC  
 TTAGATATTA CTGATGTAA GCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTG TNCCTAATTG TTTTAAATGAT  
 TTCINCTGT GAGTTGGGGT GGTGCTGCCC ATCACCACCT CAGGACGGGT ATTTGAAAAT ACCTGGGNN AATTGTAAACA  
 ATGTCGTGGG AAACACTGCA GGATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG  
 GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGTCTACTC ACGGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TNATCGAGGA CCTGGAGCTC  
 TCCAACAAAC GGCATCACT GTTGCGAGCA TTGTGGGTG GCATGAAGCG CAAGTGTACC GTGGCCATCG CCTTCGTGGG  
 CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGCG

SEQ ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGCGGC TCGGCTCACT GCAACCTCTG CCTCCCCGG  
 GTTCAAGGGA TTCTCTGCC TCAGCCTCCT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCCAGCTA ATTTCTTATT  
 TCCAGTAGAG ATGGGGTTTC ACCAATGTTG CCAGGCTGGT TTTGAACCTC TGACCTCAGT TGATCTGCCT GCCTCGGCT  
 CCCAAAGTGC TGGGATTACA GCGGTGAGCC ATTGGCACAC AGCCTTATCT GCATTTTCAA ACGGGCCAGT ATGGATGGGT  
 TTTACTTAA TACTINGAAG GTCATCCTTT TNAAAAANG AACCTTAAA ACCATTAACT ATATATAAAA ACTATATT

SEQ ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTTNA GCAAAATGAT ACAAACTINT NTTAACCAAG TAGAAGATTG GTAGTTACAG TGGAATCGTC AGGGAGTACA  
 GGGCGGCCAC CACTGGAGGG AGCTGAGGCC CTGGAAAAGG AGTCTGATTG TGTGCAATTC TCTCTCTGCT TTNTTCCCA  
 GCCCCGTTAC AACCGAGTTC ACGTGGGGGG COGCAGTGCA GCCCCAGCGG TGGCAGCTCT TGGAGTCTGT CCGTTTAGTA  
 TGTTCCTCCC ACGAGCGTGC CTGGGTGAGT GGCCTGGAGA GCTCCCGGTG TTAACATTTT GATCCTAGAC CGGGGGGACG  
 TGTCACATAG TAAAGGCCAT TGGGTAAACA GAGTAGATCA GGCCATGGCA TTTGTCTGGC CCCTTTCACA GCAATTAAGG  
 GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

CTTCAATGAT GCAATTCGAT TAGCTGTGTC TTACAAACAG AACTCCAGG ACTTCATGGA TGAGATTTTT CAGGAGCTCG  
 AGAACTTCAG CTGAGGAGG GAAGAGGAGG ACGTGCCAGA CCAGGAACAG AGCAGCAGCA TCGAGACCCC ATCAGAGGAG  
 GCGGCTCTC CCCACAGCTG AGGGGCTGGG GCTAGGGGTG GGTGGAGCCC TTTTAAATA CCTTCCCTT CAACAACTCT  
 CCAGCTCTGA ATGGAGAAAC TCTCTAGGNC ATCCCTCTT CTACCTCTG CAACCCACCC ATCCTATTAG GCTNCCACAT  
 TCTAGGGCCC GTGATACAGG GGATGAGGGT CAGCAACCAG CAAACTCTN GGACTGTGTT GGAAGAATTT TCCCC

SEQ ID NO:643: (Length of Sequence = 325 Nucleotides)

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GGTATCTTAA AGCCTTTCAG GGATTTCAT AGACACATTT CTTTAGCTGA AATCTATTCT CTCAGAACT TACCCAACT  
 TCTTAATAAT GTNCAAATTC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATTTCTC TTCACAATTC  
 CCTTGCATAG CATCATGGCT TOCTAAGGCG TTTTAAGTTT ATTGCTTCAA CTGATTCTCA TAAAACTCTCT GAGATGCTAT  
 CTGGAAAGTA TTATTATCCC CAGTTTGCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG  
 TGGGC

SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTTCACATCA GCAGCCGAC GAGGTGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTGATTGT  
 CCAGAGAATC CTAAATGAA GTTGGATGGA AACTTGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT  
 AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTCACAGTT CAATCATCAG GCCCGAGGCG TGGTGGTGAA GAATTAGATG  
 AAGGTGTTGC AAAAGATAAT GCTAAATAG ATGGTGCCAC TTAAAGCAA TCCINGAAGG ANCCAGAGGA GCGAAGGATG  
 CAGATCACTG CACCCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

SEQ ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT AAGACTCAAG GTAATGAAA CTATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA  
 ACTATGCTGC AATATTTTGG TTATTAAAGC TGGGAAATAT GCAAATGTAA GTAGTGCTTG GAACCAGAGA AGGTCTTATA  
 TTTAGCTGTT CTCTGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCTGCTCTA GGTACATTTT ATGTATATTT  
 TGACAGCATA TCAAATATAT GANACATTAG GTTAAATAAA TTAAATCCA GTGGGATAAA CTATATGGGG

SEQ ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG  
 GAGTGTATGT CATAACAAAT TTNCTCCTGT GCTTAGAAGT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT  
 TTGAGTTACT TTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC  
 ATTTATGTAC ACGGGTAATC TGTTTTGATT TTGTTGTAT GTTAAACAT CTTTATTATA GTATTNIGTA AGAGTAGGTT  
 AATATTGACC TTGGGCATTT TTAAACCAAG GGGGGAATTT CC

SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTGGCGTC AGATCTGTAA GTTATTGTC TCAATGTACG ACAGCTACAT AATGCTTAC ATTATGATA TTCCATCACT  
 GAGGAACTG CTAAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAAATATC ACTGATTAGA  
 CCTTAAAAAT AGTTCACCTG ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGAACAT ATTTGT

SEQ ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TTAAACTTT TACAAAACAA CAAGTTTTCC TTAAATTATG ATTTGTTATT ATAAAANCTA GTAAGAAAAA  
 ATTCCACCAC ATGAAAGCAT TTNCTAAAAT TCATACCCCC GTACCTATTT TTAANTACAG TTGGTAAATT GATTAAGCTC  
 TATTINCATT TTGANTGATC ATCGGTTTTA TTTTATTT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCTGCAG CCATATATGA GGTCCCTCAT GAGACTTAGC AACAAGGTGT GTTTAATGT GACAGTGTGT CTGATGTGTC  
 CCCAGCATAT TGGGACCACT ACACAGTGT ATTTGTACAT CTGCTGAGTA ACATGAGTG TGTGGGTAAC TAAAGCCCTC  
 AGTAATTATT TACTTAATG TTTCAAGCT TAATTCGAT CTGTACTTG CATGATTTAT TATTCCTGT GCTAAATCT  
 TCAATGTCT TGCCTTGATT GATCTGTCAT TATCTATCAC TTAATAAAA TANTAAATNC CTTTAATTAA GTCATGGTTA  
 AATGAGGGAC TTGTTT

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SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTTGAAAG GAAAGGTGAC AGGAAAGATG TGTTTAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCTGT CTCGTAAACG  
 CATCTGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCATTGAAT CTAAAAGACT TTNTCTACT AAAATTTCTA  
 CCTCAAATT CTCAACTAAT GAAGANTGTT TACTTTTGTT TTAACCTCAC TTCATTTTCC CAATTAACCTA TTATCAAAAA  
 AGTTAGTGCA TTGTAAAATA AGNTAATAAA GGNTAACACA TTATCC

SEQ ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGTAA ATTTTTCCTT CTGGGCTTGT CATCAGGATT GCAATTTTNA GATTAGTGT GCTAATTGTT TGGCCTTTGA  
 AAAATTATAT ACACTTGGTT TGTTTTGGTT TTCCTAAGTC AAAACAAGGA AATAAAATCA CATTTCCTTT CCAAGAAAAG  
 ATAAATTTTA AGTGGTTGTT TAGTGTTTTG TGTCTTTGGG GGTGGGAGGG GGTGTGTGGA ATACACAAAC ACACACACAC  
 AAACACACAC AGTCTATATA TAANCTTATT GGAGCCATCA CTATATTTTA AGGAAATGN AAATAATCTA TTGAAGCTTT  
 AAAATTAGGA ATTTTTCATT TAAGCTAAGG AGCCTATTTT

SEQ ID NO:652: (Length of Sequence = 353 Nucleotides)

GTGGTGGGNN CCTGTATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT  
 GAGCCGAGAT CGAACCACTG CACTCCAGCC TAGGTGACAA GAGCGAAACT TTGCCGGCAT TTACACTCTC AAAAGATTTA  
 ACGCAATTAC AATCAAAAAA CACTTGTCTAT ATATAACACT TTTTCACATG GAAATAAATT GGTTGTTTAA GGTTCACAT  
 TCCTTTGAAT AAAATTTTCAG TTATTAGTTA CAAAATGCTA AGACAGATTG AGGTCTCAA GAAAGANCTT TGAGGAAAT  
 TTATGGTTTT AAAGGGACTT TCACCAATA TGA

SEQ ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGGA NTACTTTTAT CAAAACCCAT CACAGAAATG GACAGCTTGG GTCTGTAAAC AAGCAITCAT GTTTTAGNGC  
 ATAGGTCAGT AATTGTATAT GAGAGCATAC ACTGCTACAT ACAAATTAAC TGNICAGACC ACAACTTTTC AATGTTTAAA  
 ACAGNATAAG CTTCCCTGTA AAAGCAGCAC CTTTGTGAC GNTTAACTT TAGTATTCCT CTCC

SEQ ID NO:654: (Length of Sequence = 353 Nucleotides)

GTCAACTCTA TTTTCCATAT GAATTATTAG ATTTGGTGCT GTCTGTGAA GTAACCTGAT ACGATAGATG TGTAGTATGA  
 ATTTTGTCCA CATGGTTGIG CCTTGGCAG AACTGCACGT ACCTGAAATG GTTCCCTAAT TTTTTCCTAG TATTACTATC  
 CAACACTTCC TCTCATAATC ACTAGTGTAT TGTATAATIG TTAAGTGTCC TTTATTCATA TATTTAAATT AAAAGAATAC  
 TCTGGTAGGA TTTTGGAGGC CAATAGTGT TTTCCACTGT TTGAGGTATT AGGAGGGCTA TTTACTGATA CCTGTAGTGC  
 CTTCCCATTC TGGTTTATCA TGCACCTCTA AAT

SEQ ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACTINACT TCACATTTCT CCAGGGAGGG ATGCTTTGGA AAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTTINAT  
 CCTTTTGTGA CCTTTTAA GACATAAGGT ATGTTTGTAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA  
 GAGCTGCTGT TGTCCACAGC TTATTTATTT NCCACCCATT TTGTCTCCT GGCTCATCC AGTTACATTT CCTGGGATAT  
 GTTTTGGAG GTTCTCAGA TCACGGCACT AGAGTCCCTT TGGGTTTCTC CTCCCTCTC TGTCTATTG GCTCGCCCT  
 TGACAAACAT TCCCCACATT CACAACCAGG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTATGAGTTC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG  
 GCGTGCACCT GCATTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAATGCG TTAAACCTGG GAGGCAGAGG TTGCAGTGAG

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COGAGATCGC TCCACTGCAC TCCAGTCTGG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAGG  
 GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT  
 AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEQ ID NO:657: (Length of Sequence = 334 Nucleotides)

GGTGTGGGAA AAAAAAACC CCAGATAAGA TTGTGCCTGC TTCATTTTCT TGTGAGGCTG CCCAGACAAA GGTTACTTTC  
 CTGATTGGGG ATTCTATGTC ACCTGATTCA GATACTGAGC TTGGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA  
 CACCAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG  
 AGTCTGATAC ACAGAAATG GTTCTGAAG AGCCCTGTGA ACTTCCCTGT TGAATCATT CAGACCCAGA AAGCATGAGC  
 TTATTCGACG GATA

SEQ ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TGCATTTCTT TCTGGATATT GTTGAACAAA AATAGCATTC AGTTTACCN CTAGTGCTAA CAGAAGNGNC  
 TCAAGCTGTT CCCCCATCAT GGGNGCAGCC CTTAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA  
 AAGCACTTTT TTCCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCGNCTN TGCTGGGCA CAGATGAAC  
 GCCCTTCAAG GCAATCATCA TCTTTTCT AATAGGAAG GTTTGG

SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGTCTTTATA TGTTCCGAG ACAGGACTGA AACTCCCTGC TTCAAGTCA TTTTCTAAG TAGCTGGGAC TATAGGCTGT  
 TCTTTTCTT AAAGGAAGGA TTTTATGTT ATCATGAAGG AAAATAA ATTGGCTAA CTTAAAGAGT TATTATCAG  
 GAGACACTAT TAAAAAAGG CAAATCAGAA ATTTGGAGAA ATTTTAA ATACTGATAA TAAGACAGAA TTGTACCCTG  
 TAACCATAAA TATGTAGAAT TTCTACCATA TCAATAAGGT AAGTTTCT GTTGTCCAC ATCTCTTGC ACGGTGGGT  
 A

SEQ ID NO:660: (Length of Sequence = 302 Nucleotides)

TTGTTAAGG ACATAATGTT TTGACTGGG GATCATGTT GGCTGATGTA AATATTAAAG CCAAATAGG AGCTAGGATG  
 AAAGTAACAC TGTAATTAGT AGTAGAATTT ATTTCATATT AAAATGTTG ATGACGTAAT TTTTATGGCT TGGCTCAAGC  
 AACAATTTTC AGAGTGACC CTCATTGATG CTACTCAGAG AGACGTGGAT GTGCTGTTAC TGCCTTCTAA CTCGCCTAC  
 TACGTGGCCT ATTATGATGA TGAAGTTGAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GTTGCAAGGG TAGTGGCACA TTTTATTAT  
 TTGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TTATCCGTGC ATTTCTTCTG CATTGNTAGT  
 GAATCCTTAC TGGGGNCAAC TCATTCCATT TGGCAACAAT CTTTAATGNN CAGGCAATAT ATAACATTGC TGAAGTCTCT  
 TAGCACTAA

SEQ ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTC CCAGCACATC CCTATGTGTG CGCTATTTT AATGCACCTC  
 TCTGAAACAG AGACCTTTT GTTCACAACC ATAACFAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA  
 TCCCATFAGA ATTTTTTCAG GAAAGACTTA TGGNAAAAA TATCTCTCTC CCACCTCCTT TTATCCCCAT GAGACACAGT  
 TTCCCACTGT AATCAGGGTA ATATGCATTT NTAAGTCTG ATATGTGATA CATTTATGTG ATGGCAAAGA TAAGTCTGTC  
 TTGCATGCAG GGTACTAGAG



SEQ ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CTATGAAATT AGCTGGGGAG ATACGTCTCT TATTTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGTTT  
GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACAGCGC TTGGGTGAC TGGCTTCTGG TTTTGGTTCT  
CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTTCCTTCT CTTCCTCAG TAGCATCTGA CTCTTTTCAT AAGCAAACAG  
CTGTATAAAC AAAGCCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TTGTTCCAC AACCTTATTC TNCATCAAC  
AGCCG

SEQ ID NO:664: (Length of Sequence = 300 Nucleotides)

TTGCTGAGAG AGATGATGTT TCATGGGTGA TGCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC  
TTTAGGCAAG TCAGATTTGT CTTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTCGTAGGAG  
GGAAGTGGAG GGAATTTCTG TGTGATGGCT TTAGTAATGT AGGCAGCAAG GTCAACTACT GACAGTGAGA GGAGAAATTC  
GGGAGGGCTG GTCACAGTTT GAAGTAATAG GTCATGGGA GGCAGATGTT TGTTGGGTGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACCGA TTGAGGTCAG  
CAAGAAACAA ATTATTCAT ATATCCCTG AGGGCTAGAG CCAGACTTTC CCTATGATT CCAAATTAC TTCGAGTTT  
CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTG TTCTTAAAA TTAGATAGA CTTGACAACC  
ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTGTG GGTAGAGGA ATGAGGAGCA  
AGAAGTA

SEQ ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTGAGCTGT TCCTCAGCCC CCTACCCATA CTCCCTCCCT ACTGTTGATC  
AGGCTGGTCT CTAACCTCTG ACCTCAGGTG ATATGTGTGC CTCAGCCTCC CAAAGTCTG GGATTACAGG TGTGAGCCAC  
CATGCCCTGGC CTGGGTTTTA TCTAAGGTG TTGTGTGTGC TGTTCCTCT GCATGAATAC ATTINCTTCA TTTACTTACG  
TCTTAGCTTA AATGATACCT CCTTCTTCT CCTACTGCCA TTATCTTCCC TTGTCCTCC ATACTCAGAT TTCATTGCA

SEQ ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTTGCANT NCAAGCCAG GNGTTTCTG ATGGGTGAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC  
CCTACTCTAC CTCTACCCA CCTACCACA GCCCTAGCT CACCCTCCC CCAGGGCATG GGACTCTTGA TAATTCCAAG  
TCCATGAAC CCTACAATTA TTGCAGTGG TATGANTCCT TCTATGAAAG TACTTCCCCT GAGTGTGCCA GCCCTCAGTT  
TGAAGGTCCC TTAAGTCTC CCCAATTAA CTATAATGGG GATATTTT

SEQ ID NO:668: (Length of Sequence = 212 Nucleotides)

TCTTTTCTNT TTCTTATCTA TCINCTTAC CATGTGCTT CGGGGCTGG AACATAGTAG ATGCTCAATA AATATTGATT  
GAATGAATGA ATGAATAAAT CTNCTTACAC CTCTCATGCT TCAAACAGGG AAAGGCTAGA TTATTTAGAA GTCTTGTGCG  
GGATAATAAT NAGCTCAGTG GAAGCCCTCT AGTTCCTACT CGAGTTCTC CC

SEQ ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTTCAA CCTATCAAT AAGATGTTAT GAAAGATGG TTCTCTGTG TACAAGTAGT ATAGAATCTT TTTGATCTT  
TGACTCTGTG CTGCTATCT CATCAATGTT GTTGCTATTA ATATCTGTCC TTAAACTG GATGTTGGGA TCTTAGTAAT  
GTGCTGATA ATAGGATTTT CAGCAAACT TCCATATCCC TTGAAGATAT GGTAGTTTAT ATTACTATAT CGATAACAGT  
TTTGCTGTG GAGATTTGAC TAGTTTTAGG TGTTTGAAG C

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SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAAGTTG GGATATTTGA TTGTTTCCTT TTCIGATCTT TATGCTGACT GCAGTATCAG ATACCATTTT ATTGTTTAAA  
 AATCTTCCTT TTTTTTTTTT TTTTTTTTGG CATTITGCTC TTTTGTCATT GTTTCAAAGT CAAGTTGATG GCCNCAAAAT  
 TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CTACTGGCAG CTAGTTTTAT TTCTTAAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATGTGTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC  
 AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACTCTT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA  
 ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANTTC CTTGAAGGCT CAGNACGTAC AAAANTCAGT NTTTNTGGCA  
 GAAAGCACAT CC

SEQ ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAAC TACTACTCAA TCCTCTTGAA ATCTGCCTTT TGTAATGTAA CTGATAGGCC AGCGTTTCTT TTCACTGTGG  
 GAAATAAAGG CTACTTGGIT GCTTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTNATTACT  
 AGTCCACCCT TAATAAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCATT  
 GTTAGACAC TCTCCCTTCT AGTGCCTTGA GAACCTTCAT GGAAACTCTG TTCAGGTTCT TGACTCTCAG CGACANATGT  
 GGAGGTCTTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACTA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCCTCCCA AAGTGTAGG ATTACAGGCG TGAGCANCCA CACCCTGCCT GGTGTGTAC TCTTTTAAAT  
 ACTAAGTTTT TAATGTAAA TGCTGCTTTT AGATACACTG TAAAAATACA CCTATCAATG AGTTTTTTTA TAAAAACAT  
 TGCAATTGTA CTAGNCTTTA AATACTAAGC AATAATTCAG GCTTCAATGT TGGTTTATAG TTTTCTCATT TCTTTCAATT  
 AATACCTCTG TAAATGAAG CAGTTACTTC CATTTTCCTG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT  
 AAGTGAGGAC TGGAGCTCTG GATCCTAAT

SEQ ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACTTTGGG AGGCCGAGGC AGTTGGNTCA OCTGAGGTTA GGAGTTTGAG ACCAGCCTGG CCAACAGGGT GAAACCGTIN  
 TTCGTCTAAA AATACAAAAN TTAGCCGGGC GTGGTNGTGC ATGCCCTGAG TCCCAGGTAC TCAGNGGCT GAGGCAGGAG  
 AATCACTTGA ACCCGAGGTG GGGCAGNGG AGGTTGCAGT AAGCCAAGAT CGGCCATTG CACTCTAGCC TAGGTGACAG  
 AGTGAGACTC CATCTC

SEQ ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATTT TAGACTCTCA ATTTTAAATT AATTTTGAAT CACTAATATT TTCACAGTTT ATTAATATAT TTANTTCCTA  
 TTTAAATTTN AGATTATTTT TATTACCATG TACTGAATTT TTACATCCTG NTACCCCTTC CTCTCCATG TCAGTATCAT  
 GTTCTCTAAT TATCTTGCCA AATTTTGAAA CTACACACAA AAAGCATACT TGCATTATTT ATAATANANT NGCATTCACT  
 GGCCTTTTAA AAAANTGTTT GATTCAAAAC TTAAACATAC TGATAAGTAA GA

SEQ ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATTT ATTTTGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCCT TTNCTATCCA  
 AATCTGAACC CAAAGTGCAG CCTGGGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG  
 TTCAAGGGAT GGACAGGAAT AAAGGAAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA

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AAATATAATA TCAAAAATCA CTGCTGAGCT CTNCTGGCCT TCCATACTTA GCTCACCOCG GCACCTTGAAA TTTCCACTTA  
CTAATACAAA CTGCTCCTCA GGAAGGANGA GATTACTTTA GNAAATCCTT GCAGGATGTT CCTGTCTATG GT

SEQ ID NO:677: (Length of Sequence = 333 Nucleotides)

CGCATGCTAA TTTAAAGATA TACAGGAAGN GAAAAGTAGG AGTTAAGTTG GATGTTGTTA GAAGTTGGAT GTTAGTATTA  
CCTTCAGGAA CAGATCCCCA TGGCATGTCA CAGGCCTTAA TTATATACCT GGCTTTCTTA TTGTCTCCAC TTTATCATGA  
GGACAAGGTC TTGGTTTCAT GGGAGGAACT TCTCCATTGA AATAAATGTC TGCCATGTCA GCACCGTTTG TNCCTCAGT  
TTTAAATATA TGGACCATAT ATTAAACATN ATTAAACATA TTTTAAATN TGGTGTCACT AGGTAGATGC CCCAGNCATC  
CTACTTCCCT CAC

SEQ ID NO:678: (Length of Sequence = 359 Nucleotides)

AAGGAGACAA AGAGTAGATA TGGTATCTTG GGGACAAATG GCACATGAAA GCAGATTGG TGCTTCTTTG GTAAATGGTT  
TGATAACCAA TCCCTAGGAG ATAAAGTTAA TGTCCTTTT TTTTTTTTTT TTAANCGAAG GTCCCTTACT GGTCTGCTT  
CCATGAGTAG CCGTGACCAG GGGAAAAGGG AGAGTTTTT TTTTTTTTTT TTTGAGAAAG AGNCTCACTC TGTCGCCAG  
GNTGGAGINT AGTGGCATGA TCTGGCTCA NTCAGCCTC TGCTCCAG GTTCAAGCGA TTCTCTTGCC TTAGCCTTNC  
GAGTNGCTGG AATTTGAGG GCATGCACCA TGCCTGGCT

SEQ ID NO:679: (Length of Sequence = 339 Nucleotides)

GGTGGCACAT GACTATAGTC CCAGCTACTT GGGAGGATGA GGTGAGAGN TCACTTGAGC TGGGGAAGTA GAGGTTGCAG  
TGAGCTGAGA TCTCACTACT GTACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAA AATAAATAA GANAGAAAGA  
NTATAATAT TTGTATCAA TTTTCAGCTT TTACAGTCAA TGAACCTAAG TCTTAATTTT GGTACAGAA TTAAATATTA  
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GGNAAAGAGA GTGAATGAAA  
AGAAGGATAC TAATATTCT

SEQ ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA  
GAGGAAAAGC AAGTTGGCCT TGGAGTCAGC TGTCAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGGT  
GGTCACCTAG TGTGTCCGC TGAAATTGG AGGGTTAAT TTTTAATCCA AATACCATAG AAATGGATAT GAAAAGATGG  
GTGACACATG CTGCAGTTG GGAAGTGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT  
TTTCGTGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEQ ID NO:681: (Length of Sequence = 345 Nucleotides)

GGCCTGGTGT TTGGCTGAGG TGCACTAGGA CCCTGGCOG TGGTGTACTG GATGGCATCA GTTCTGATGG GTCANATGTC  
CATCTAACA GGTGGTGCT GGAGAGGGAG CAGTGTAA ATATCTTTAC TATCTCCCT NCTCCGGACA CCTAGATGCC  
CAATATACA GCACGTAGTA TCGAGGCAGG CCCTTTTGAT TGACATCAGA ATCAGGTTTG CAATGGAATA GGAGCTTTCC  
TTCTCTCTGT CACTTTAGCC CCAGGCTCCA CCTCANAGTC TGGATGCTC ATACCTATGG CAGGTGACCT TGTGTAACAG  
NTGGGGTTA ATGCCATTCT GTCCT

SEQ ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTTC TCCTAGCATG ATGCCACCC CAAGGTACTT ACAGTCTTC AACACACCT TCCGGACAGC  
TTGTTGGTAT CTGTGTGGC TATTCTGGTG CACGAATAA TTCCATCTT TTGAGATAAT GGGGGGAGC CTAGTAGGCT

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CTGGTTCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTTCTG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG  
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCCTAG NCACTCACAT CCAATTTTCA GG

SEQ ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTTTAAAT AGTTAAAACA TTTTITAA TCCATAAGTA ATTCTTACTC TACTCATTTA TACACACATA TACTCACATG  
TACACAGACA TACCTACACA CACACTTATA AATACATGTA TACACAGAAT ATAGTAAGGT CTTTATCCC TTTTCAATGA  
AATAAATATT GTATTCTATA TTTAGNATAA ATAATGTTGA AAAAGTGATT TTGGAGAAAG GTTGAAATGA TTGAGTCTTA  
AGTGIGTCAA TGTATAATCT ACCCCTTCT AAACATCGTG TTTTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT  
GTGTTTAGG

SEQ ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTTGAGATT AACTGCCAT GATACATTGN CTGACAGCAC TTCACATTTT CCCTGAGTTG GGGACAGAAA  
TCACACTGCC CAAATACATT ATCTGATGGC TCTCATGTT TCCAAAAGT TAGGAAAGGA GGTTCATAT ACATACATGC  
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGTN  
CCATCTCTCT NTTCCTACC CCCTGCATCT GTCCCTTAT A

SEQ ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTTTAAATA ATTTTAACT AGCTACAAA TGTCAATCAC TTCACAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA  
CATGCTATAA TGATATTTAT CTCACAGTTT ATATTTCATT CATTATATTT ATTTTITTA AAGGTTTCTT TATCAGCTAC  
TAAACATCTC AGCAATTTGG TGIGCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT  
GGTGGTTAGT AAGAGTCAGC CTTATAAAAT TTACATCCAC ACTGTTTCA CAGCAAGNTT GCTCTCTCCA AAACGGTGGN  
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CGAGGAGGAG GAGGAGAAAA TTCCCCAGA TTGGGCGAGG CCCGACCCC ACATTCCGTC CTGTTTTGAG AGGAGGAGGG  
AAGAGAAATA AACGTGGCAG CGCATAGAAG GCCAGCAGGG AGACTGCTTT CCAGACACCT CCGGCCACA CAGCCGTTC  
CCCCCGTTT TTTAGTCTT GGAAGAGGAA TTGGGCTCTG TTTTCTTTT GGGCTCTGTG CAACTNCAGC TACAGTGGAA  
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TTAAGCCTA AACTTNAAGA GCCTCACCAG  
GACGAGCAGG CATNCCTTAA CCTTAAAGCA ATCCAGTTTC ACGGCCTGGT TCAGTGAAT

SEQ ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACTTCCC CTCTTTTATG GAAGCATAGT AAGATTTTTC CTTTATGGCG ATCATGATGG AGAAGTATAT GCTACAGGAG  
GNGAGGTTCA AATTGCAATG GAACCTCAGG CACTATATGA TGAAGTAAGA NCINTGCCAA TTGCAAAGCT GGATAGGACA  
GTTGCTGAGA AAGCTGTTAA AAAATATGTA GAAGATGAAA TGGCAAGGCT CCCTGATAGA TTGTCAGTAA CTTGGCCTGA  
AGGAGATGAA TTATTCCTA ATGAGATTAG GCCTGCTGGA ACCCCTATTG GTGCGTTAAG AATTG

SEQ ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAGT CTGTGACAAC GACAAGGTGA ATACAAGCCA GTCTCTACTT CTCTGGGCCT  
CTGTTTTCTG CACTTATAT AAAGATTGGG CAAGATGGTC TAACITAAAT TTTATGATTC ACTAACTTGA TTTGTATGG  
GGCAGATTTT NCTTCGATGA AATATTAA AATAAGNCAC TCAAATAAAT CAGCAATGGG GTGCAGATGA GGACTACCGT  
TTCTACAGCA AAATATGGGT GAACTCAGTA AGTGTAGGNA CACAGAAGTT AATGCTGACC TCTTGATAG CATGTATGGG  
ATATTAAATC ATTTCTGCC TTCCATTCA GGGGTGAGGG AGGAACAGCT GTTCTGAAC TCTTTAAGG

221

SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGTG TTAGCATTTC TAACTTGAG ACTCTAACAG TAAAAATAAA GTAATCTGAA ACCTGTTTCC ATGGGTAAAA  
 CACTCTGCCT GGTATTCTTG TACACAAAAT TTAATAAATA TGTAATATC ATAAAATGAA AATATCACTC CCTTCAATTT  
 CTTTGGCCTT CACAAATTCA ATGTGACTAT GATCCTTTTC AATAATACTT TCAATGACAT TGTGCTTCTT TAGAAAAATC  
 ACTTAAGTTG TAGCATACAA TAGTTAACAT TAGTCCTTTT ATTGCTATGG TATATGCTAA TTTTTTTAAA AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAATACT CCATATATTT NAGAAGCAAT TGAAAATGCA TCCATGTATG TNATTGAGC GTTACTAGAA ATTTATTTAT  
 ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GTCAACGATG  
 AACTGCACAT ACAATGGTGG CCCATAAGA TTAAATAGA NCCAAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT  
 AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT  
 GGACTGGCTA AGGACGATCA GCTGAAGGTT CATGGGTTTT AAGTGCTTGT GGCTCACTGA AGCTTAAGTG AGGATTTCTT  
 TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTACAGGT TTAAAACTT CACAGCTTGT ATAATGTAAC CATTTGGGGT  
 CCGCTTTTAA CTGGACTAG TGTAACTCCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTG AAGTCCCTCA  
 TTTAAACAGA GGTCAAGCAA TAGGCGCCTG GCAGTGTCAA GCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC  
 AGAGNCCTAA GGTTTACAAA CAACTATGG NCCGAACCT CCTCAAGTTC T

SEQ ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTTNGA TTATGTATAT TAGAAATGTT TAAATTAAG ATATTAACAT TTCATGAAGC TGAGTGGTGA GCACACCAGT  
 TTTATATTCT CTCTATATAA CTTGTGTAT ATTGAAATG TTTTCTATA AAAAGTATTT AAGCAAGTTT AGGAAAGAAT  
 ATTGATAAAT GAAATCTAGA GACCATCAA AGCCAATTTC ACCATCACAA AGTATAATTG TGTTCAAAT ATAATTGAAA  
 TTGTGTGACT GTTGCATATT CTCTTTTGTG TTGTGTGTA TGAAGCATC TTAAACAGTT GCCTTTCAA GCTGTTATCT  
 TTGATANFAA CATACATTAA CCTAACATTG TGGACTTCTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCCATTTC CATAAATATG GNTCAATAAA CACTTATTCA TTCTTTATAA  
 TTAGACTCTA TTGTTAGAAT TGTTTAGGT TTATAGAAA ATGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC  
 CCACAGAAAT TCACAATTTA CCTGCGATT AAAGTCTAAT GTTAATATGA TATATTTAGT ACAAGTAGTG GGATTATATT  
 GATACATTAT TATTAATTAA AATCCNCA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GGCATAGTCA CTTCCAGACA TGGTTGCCTC TCCATGTGGA GTAGGTCAA GTCTCCGTCC TCCCTGGCCA GGTGGAAGCT  
 CCAGAGGGAC ATGTTTCAGC TTAGTACAAG GTGGCTGACA CTACTCCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG  
 CCCACTCAG CCTGTACCCA TCAAGAAGTA TTCAGAAAGG ATGTCTCTGG CATCCACAAG ACTACTGGGC GAACCACACT  
 GCAAAAATGA AACTAGCGT ACACAATTTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATTGGTGAC TCTGGGAATC  
 TAGAGTGCAA

SEQ ID NO:695: (Length of Sequence = 344 Nucleotides)

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CACTGTGACG GATGAGTGGG TATTTC<sup>1</sup>TTTG TACCTTGAGC TC<sup>1</sup>TTTCATCC TACCTTGGTG GTCAAATGTG AGAGCAAGTG  
 CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCA<sup>1</sup>TG GAGTCTGT<sup>1</sup>TG TGGTGAATGT NCTTGCTGGC ATCTTGATCA  
 AGGACTTTGT CATCATTAGC CATCAAATGC TTGT<sup>1</sup>TGGTCC TTCTCAACCC TGTAAATGTG ATACTTAAAA AACTGGAAAC  
 ATCTGACAG AACAGTCGA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGGTTCTG  
 TATTCAGTGC CCCATCAAAA ACAG

SEQ ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTC ACATCGATGT  
 TCATCAGGGA TATTGGCCTG AAATTTTGT<sup>1</sup>T GTTGTGT<sup>1</sup>TG TATCTCTGCT AGGTTT<sup>1</sup>TGGT ATCAGGATGA TGCTGGCCTC  
 ATATAATGAC TTAGGGAGGA GTCCCTCTTT T<sup>1</sup>CTATTGTT TGGAAATAGT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT  
 ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCCTG ACCTCAGAGG  
 AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AAITTAATCAA TCAGCCATTT TGGTGGCCGA AATTTATAAG GCAAGTAATA CTTT<sup>1</sup>TAGTTT CTTTGATAGA CACCATGATC  
 AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAATT TCTCTGAGTC  
 TTCATAAGAA ACACAAGCAA GATTTCACAG AGGCAGTGGG ATTTGAAC<sup>1</sup>TG AGTCTTGAGA AATAAGCAAT ATCTGAACAT  
 GTAGAATGCA AAATAAAGGA TAAGCAAGTG CTAATGCCCA GAGGGGTAAT ACATATTAA T<sup>1</sup>ANCCANTAA CCAATTGCTA  
 CTTGTGTTTC TTACTACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAGG AGAAGCAGAA GAGCAGGGTA AACCTGGGT ATAATTTGTC TAGACCCCCA TGTCTCCTTT AGTCTGAGTT  
 CTGACATAAT TAAC<sup>1</sup>TGCTA TGAGATGTAC TGGGCCTTTC CTCATGTCTT TTTGATGCCA CCTCACTAAT GTAAACAAAA  
 CATTCA<sup>1</sup>TTT TTCATCCTAT TTTTCTTAC AGCTGCTTAG CACAGTCCTT ATGAAAAAAT GAAGCCTTGA AAATGGTATA  
 TCCTCTCGAC AAAGCTAAGC CTGACAAGTT GGCTGCATTA CCTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGTGCTC TAGACTGTGA TGCTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCCTAG GGCCGGCATA  
 TGGGCCACTG GGTGGAAGAG GGGCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA  
 TTCGGTCACG CTTAAATGT TGAATTGTG GCAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT  
 TTTGAATTGT AATTAGATTA ACATTGTAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTGGG T<sup>1</sup>GATTATC  
 TTTATCACT TCTAGGGNCT TACTCCTAAC AGTAACTCAC AAACCCAGCC CCAAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTTGGA TTTGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TTTCTTTAGG  
 ATGAAAGAGT TGTTT<sup>1</sup>TGGA GGACAGCATT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCTTAGGCA CAGGAGTGGC  
 CCANAAGCAG AATGAGGATG TGGACTCTNC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTATG  
 GGGCCAGGC TCTTCAGNT GGGCCTGATC CCNCA<sup>1</sup>GTGT GCTTACTNIG CTGACTGTGT ACTTATCTTC CCCAA

SEQ ID NO:701: (Length of Sequence = 387 Nucleotides)

GGCAGGAGAA TCGCTTGGG CCGGGAGGCA GAGGTTGCG TGAGCCAAGA TCGTGCCACT GCACTCCATC CTGGGCAACA  
 GAGCGAGAGT CTGTCTCAA AATAAAAAAT AAAAAA<sup>1</sup>AAA GGTAGGTCTT TTCATCATG TGTTTTCTAG CATGTAGCAC

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TGTAACCTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG  
 AAAGCTAAAA TATTINCCAC GTGAAAACCA TGCATCCTGT TCAGAAACTA ATTCTGCCTT CAGCCTTCC AGGAGCATGG  
 GAGGGGTGTC GTCTGNCNC TTTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAA AAAAGGAGCT AACTAGATGC TGTCATAAG AGACTCACIT TAGATCTAGA GACACAGGIT CAATGTAAAG  
 GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTGTGCCCA CCAAACTCA  
 TGTTTAAATT TAATTGCCAA TGTAAATGGTT CTGGGAGCCT GGGCCTTAAG AGATAATTAA GATGGATTAA TGCTTTTCCC  
 ATGAGACTGG GTTAGTCGAG ACTCTTGCAA AAGCATGTGT TCGTTAAGTG GGTCATCCCT CTTGTCTCTG TCCTTTTAT  
 ATACACTTCT TTCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAGA GGAATTCAA TGAGGCCTGA TGGATTTATG GACCAGAACA ACAGAGGGGT CITGAAGGAA  
 GGAAGATATA GAAAAGGCAA GGTGTGGTT AGAGAGGAAA TCCAGAGIT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA  
 GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTCAAAT AGCATAATGG ATATCTTTGA  
 CTCTACCTT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTAT ACATACATT  
 ACATATTITA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTTGATTTAG ACTCTGCCCA TTTTTCCTG  
 TATGACTTAC ATAAGTCATT TTGTGTCCAA GCCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA  
 AATCCCTTTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTTGTT TCCTTCTTAA GAGGCTTCTT ACTATAAAAT  
 GTGACCTATT TACATTTTAA GTTGAAGTAG CCCACAATAA TGAATAATCA NTTTAGATTT TCCTCATCTC CTTTGGGAGA  
 AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTAC AGTTTGTATA  
 TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTCACGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC  
 CACTGTCTGC GCTGATCTGG GNCCTTTTCT CTCTGTCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT  
 TTTTCCAAG NTTTTTGCTT TNNCACTTCC TGGTGCTTGT TCCACAATTC AATAGATGCT ATAAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGTA TACCTCAGTC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCCTCCTC ACCTGGGTTT TGAGTGTGTA  
 CCCTTTTATG AGAGTGAGAT GCCACCCGGG CAGCACTGCT TAAAGCTGGC CAGCACGAGT GACTAAGGGG AGAGAGCATG  
 ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA  
 GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

CCGNGAGTGT GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCCGTC TCCAAAAACA AAAAAACAA AGTTGAACCTA  
 TAACTGAAT TCCTCCCAAG GTTAGTTCAG CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGTAGA AGCAAGATGG  
 NGTCAGGCCA GATCTCTTTC ACTGTTAACA TTTTCTCAGT TATAATTTTT GCAATGTGG TTTCAGTCCC TGCATCCATA

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ATACCTAGAA ATTTTGATAA ATACTTGTTA AACAAACAAA AATAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG  
GTGG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

GGGCTCATAC ACAGTTTAT TTCTGTGA TTTTACAGAC ACTCCATCCT GCAAGCCCAT TCCCTTGGAA AACCCAGAAA  
GAGTGGGCAC AGTGCTCCCT AGAGGAATAG AGGGGACAAG ATGGCTGCCA GGGAGAGGGC AGTTGAGGCA CTTAGGGATT  
TACTCCGGCC CTGATGGAAG ATCTGGTGCC CAGGGTAGGG GGAGAGGGCC TGGGCTGGGC TGGAGCCCTC TAGGTATTTT  
CCAGAAGCCC CTTCAGGAAC TGTCACCTGG ACTCCAGCAC CACCCCTCGT CATGTTGTCA CTTCCTGTGG TGGCGGGAGC  
GCAGG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCCGTT GCATGAGGCA CTTTGTCAAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT  
AAGACCCAGA TCCACGCACT CAGGAAGTTG CTCTGAATTT CAGTTTGACA ACAGAGAAGT AGAATATTTC TAATTAGCTA  
ATATATATAC ACATTTTITA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG  
AGAGANCCCC ACAAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTTTTATTA TATACATATC AGTACTCACA ATACGTTGCT TATTTAAGAT GGCTGTTTAT AAGTATAAAG CAGTTTGAGC  
AACACTGATT GTGCATTATT GTACTTCAGA TGAAAAATCC TTACATGCGG AATCAATGTC TTTTAAATTC TCAGATAAAG  
AATTINCATT TGAGNGACA TACAATTGTA AGTGCTCATT TTTTGTCAAT TTTAAGACAC CATTATGTGT AAGANGGATT  
AATTTTNCCT TAAATTTACA AACACCCCTC ATGCTTGAC ATTACATGG AAAGGGCAGC ATAACCATTT AATCATCCAA  
ATGCATATCA GAGCAAATC CTAGGGCCTT TAGGTGTGAG GGTTGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTTC TATCTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG  
TTATGGCCGA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTAAAC AAAACCCCTT  
GATGGAAGCT TAGACCCTCA TTGCCAGTG TACCAAGCC TCTTTGAACC TTGCCT

SEQ ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTTTTTTCC CATAGCACGT ATCACTCTCT CATGTGTAC CTGCTACACT AGAATTATGA CCCCTAAGAG GGAAGAGACT  
ATGTCAGTAT CATTGATTCT NATTAACACC ATTATTAGA ACCATGCTTG GCTTAAAGTA GTAGCTGCTC AGTAAATATT  
TATCTATGTG TGAATTTTGA AGTNCCTCCT TTATATTGAN TTAAATTTAG TCTCTGTGT GCAGCAGTCT GGGTTTGTCT  
TATGTTGAAA TACTTATGTA GACTTCTACA TACATT

SEQ ID NO:713: (Length of Sequence = 354 Nucleotides)

AAACITTTACA ACCTGCACAT TTGTTATGCA TACTAAATGG TGTGTTAAAA TTAGGGTTTC TTGCCTCTC TACACTACAC  
TAATCTGCCT AAAGGTGGTT GTTTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTTTAG GTAGAAAATT  
ATCTGATTTA AATACAAACA TATTTTCTC ACATTGAGTA ATATGCATAA TGTAGTTCCA AATGTATTTT ATTACTATAG  
TCACAATATC CAACTAAAAA TTACGCTATC TAGAATTGTA CCANCCAAAA TCTCGTATTG GCAGATCTTG ACAGGCTGGA  
CCTGCAAGNA TGTGGCTTGG AATTTTAAAC CCAT

SEQ ID NO:714: (Length of Sequence = 349 Nucleotides)



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CAGTAATTCT CTTCATCCT TCCCAAAAAT CAGTGTCTAG GGACTAGTTG ATCTGGATGA GTTATACATG ATATTTGACT  
 TTNCATAAGT AGTGGGAAGGT TTCACTAAGT AAAGATCTGA GTTCTCTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT  
 TTGCTCAACC AGACAGGAGT TAACTTGTAT TAGAATTGTT TTNCTAAAG TNATGTTACC TGAGAAATTA AGGACTGCAC  
 CTGGTTTAAAT GTTGCTTCAC TTATCCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGCC TCGAGCATCC AAGCATGATT  
 TTCTGTGAC AAAATCTAAA AATCCAACC

SEQ ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTTGAAA AGATCTTCAC CAAAGATATA TGGATAGTAA GTAAATATAT GAAAGGTTTT CACTGTTAAT GATTAAAGGA  
 AATGCAATCT TGTACATGAA TGTTTATAAC AGCATCATTC ATAAGAGCCA AAAGGTAGAA ACAATCCAAA TGTTTCATCA  
 CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAATATTA CTGGGCCATA AAAAGAAATG AACTGGGCCA  
 GCGCAATGA CTACGCCCTG TAATCCCAGC ACTTTGGGAG GCINAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTTTITAG TAGAGACGGG GTTTCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TGTGATCCG CCCACCTCGG  
 CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTGGGTGIGA TCTCAGTCA CTGCAACCTA  
 CCGCTCCCAA GTTCAAGTGA TTCTCCTACC TCAGCCTNIT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT  
 GATTTTCTTA TTTNAGTIG AACTGCAAT TCACCAGNT GGCCAGGCTG GTCTCGATCT CCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTTT TGTATGTGA TTTTITATCA TGCAATTTCA CTGAATTGTT TTTTCAGTTA TAACAGTTTT  
 CTATGGAGT CTITGGTTTT TNCCAAATAC AAGATCATAT CATCTGCAAT CAAGGATAAT TTGACTCCT CCTTCCAAT  
 TTAGATGCC ATTATTTTTC CTCTGTCTG ATTGCTCTAG CTAGGATTTT CAGTACTATG TTGAATAACA ATGGTGAAG  
 TGGGTATCCT TGTATATTC CAGGGTCTG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAAA CATAAATAT ATTAGAAATG GAAAGTTAT AAATCAACTA CAGCAAGNT TTAATACTAT TATGAAACAA  
 ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTCT TTCATAAATA ANTGACAATG GGGGAAAAAG  
 A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TTTTITTTT TTTTITTTGA GACAGAATCT CGCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCTCG  
 GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG  
 GGGCTGTGAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCAATTA AATATACTA ACTACATTTT AAATACGGAT  
 ATCATATATT TCTGATTAG TATCAGGTAA ATATCTAGAC TCCTATCCTG AATCCGGTC TCAGATAAAA AGGTCAGAGA  
 CAATTACAAG GAAGATGCTT CATATTATCA GGTCAGTATA TACCTAATTA TGTGCACTGG AGAGTAAITTT ATCTTCATT  
 ATCATTTGTA AACATGTTT TTTACATTT TTGTAGTTGT CCATAATGTA AGCTGTGGG TTGATTATT GTTTTCCACA  
 CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

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AAAAGATTTG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCACATGAA AAGATGCTCA ATATCATTAG  
 ACATTAAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC  
 CATATAGAGT GTTGGTGAGG ATGTGAACAA CTGAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT  
 GGAAAAGAGT TGGCTGTTTC TTCAAAGTT AACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEQ ID NO:722: (Length of Sequence = 266 Nucleotides)

ATCGTGCCAC TGCCTGCAG CCTGGGCGAC AGAGGAAGAC GCCATCTCAA AAACAGAAAA AAAAAAAAAA AAAAAAAAAA  
 AGTGCAGCTC TCTAATTGGG CTCTTTTACT TACTATTAT ATAATAAAG CCACGTTCTT AGGCTGTATA ATGGGGTTAA  
 TCATAGTAAG TACCTGTAA AGTTACTGTG ATAACCAAT AAGTGANCAT AAGTAAAGCA TTTTACATGT GTGCAGCTTA  
 ATAAGTTGGA GTTGIGACTA TTATTT

SEQ ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTCATG AAATAATCCA TGTAACATCA CTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAC  
 AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGTCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT  
 TTATGCTTT GTGGTAGTAA TGGATTYCC TAAAGCTGTT TCCTCTGAT CATTATAAT CCTGTACAG CAAAGGACTA  
 TTGTCTTTG GTATAGTAA ATAACCTGT TGAAGCACC GCTTATCTC AGACCACAGC GCATACITCT TACTGGAAAA  
 TATAATGCAG GTGCCAACAC CCAAAGGCA TGACCAGGGG TTCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAAC GAAGTGTGGA AGAAATGAAA GGGCGAAGT GTGTTTGTAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA  
 GAATTCCTCT CTGGACTGGC AATTGCGATG TACCATCTGG ATAATCACC AGAGAAACAG TTCTCTACTG ATGTTTGTAA  
 GCAGGCCATT GAGCTGAGTC CTGATAACCA ATAGCTCAAG GTTCTCTTGG GCTGAACT GCAGAAGATG AATAAAGAAG  
 CTGAAGGAGA GCAGTTTGT GAAGAAGCT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGAGTGC AGCCAAATTT  
 TACAGAAGAA AAGGTGACCT AGACAAAGCT ATTGAAGTGT TTCAACGGGG TGTGGGAAT CCACACAAA CCAATGGCTA  
 CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAT GCAGANTACA GGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACTTAGT TTTGTGAAAG ACTCAGATG TCACITGGTT TCTGGACAG GTTCGAGACC  
 TGGCTGTGGC TTGCTGTGGC CTTGAGAGCC ATCCACAGC AGCAATGCTG TTGGACCCIT TGGCTGGGAC CTTGAGACC  
 CCTGCAACA GCACTGTGTN CCTAACCTGC TGGCATGATG CCCCTTINTT GACAGGGCTG CATAAAGGC CAGCGACAAG  
 TGGCAGGCAG TGACGCCAGC CTGGATTGTC TGAGGGCACA CGCCATGCTT CTTGAGTGC CAGTGTCTT CTNGGTCCAC  
 TTTGCAGCAA GGATAGATGT GGTCTAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGTAGAGT AAATCCTATT ATATCGAGAT ATTGGTCAGG CAAGAATTTT NCTTTTAAAA TAATTATTG TAAATGAACC  
 ATAAAATTTT NACCTTTGTG CCATCTTCTA GGCTATAAAA TAGTCTTATA AAGAATCAGA TTGTTAAGAG TATATGAAAT  
 GTGGATATGG ATGTGGAAGA TCCATAACGA GGATGATGAA AGCACATTAA GAAGCTTTCT GATGGGTACA AAAAATAGAA  
 TGAAGAAGAT CTAGTATTG AGAGCACAA AGGGTGACTA TAGTCAACAA TAATTATTG TGCATTTTCA CATAACTAAA  
 AAGTATAATT GGGATTGTAA CAGAAAGGAT AACTGCTTTG AGGTGATGGG ATACCCCATTTT TACCCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)

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CCTTTAAGC AGCGGATCCC CTGGTCCCCA CCCCCAACTT TATATTCAAT AGGCCTGAGG TGGGGCCTGG GAATCTGGAT  
 TTATAATTG CTCCCTATG ATTCCAATGC CAGTGGGTTT TAGACCACAT TTGAGAAAC AGTGCTGTAA ACTGTTTTC  
 ATTTGCAGTG AAGGAAAATG TAGGGTTTGT GTCTGAAAC TATGCAGAGA AATTGAATAG TATTINAGTC TAATCTTGCT  
 TTTAAATAAC ACGGAAATTT TGAAAGTCGG CTTTAGGGAG TTCCAGAAC TGTCCATGAA CAGCAACAAG AAAGATCCCN  
 GTGTGAAAT GAACACTGGT TGGTAAAA

SEQ ID NO:728: (Length of Sequence = 305 Nucleotides)

TGTTTATTA TAATCTTATA CAGTCTACAT AAATTGAAC TGTATTATAT TTGGGTTTCTAG TTATAACATA GCATAATAAA  
 AATCAAGCA CTGGTCTCTT GAAATAAAGC AGGCAATCAC CATTCAATAA ACACACTTGA TTTATTTTGT ATAAAAGGGT  
 TAAGTTTACA ACTAACTTTT TATAAAANGT TTAGCATGAA TAAGTACATC ATTACACTTT TGAATGCAGA AATAGACATC  
 TCTGCCACTA TACAAGAAAA CTCTAATTAA AGAGTTCACA AGGTTTCACT CAAATAGATA TATTT

SEQ ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACATTT ATTTTCTAT TTTCCATGAA GAAGGAGAGG GACAATTTTA GATTCAACCAG TGTGCAGGAC AAATTCCTAC  
 TTAACCTATA GAGGAGCAAA CTTTCTTCAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTCTCG  
 ATGTAGCATG ACTACAAATT GTCACAGTAG ATTTTGGATG ACTTTACCAT AGCCACACTT AATGAATTAT TATTINATAT  
 NCTATTTGTA CTTTAATAAA ACTATATTTT AAACCTTAAA ATTGTCTATT AAATTACTAA AGAAAATGAG TAGTTCCCAT  
 AATGAATCCA TAATGTTANG AATTGCTTTT AGCAAATGAG GACTATATTC ACCTANGCTT TTG

SEQ ID NO:730: (Length of Sequence = 311 Nucleotides)

CTCTTTTATT CCTTTAAGT CTTAACAAA GAAAGAGTCT CCAAAGTTTA AAAAACCTTT GAAAAATATA CAGCTTGATA  
 TTATTTACAT AAAATATGAN TCCAGGTTCC AATATCAAAC AAACATTGCT ATGTCAGAAA CACAGTGGAA GGCAGGAACG  
 TAACCTACTG CCTTTAGAT GCAAAGACTA ATAGACACGT TCTCCNATCT CGACTATCTT NGTTACCTGT TATCCTCANA  
 ACATAATTA TTANGGCACC TGNGAGGTTG GATGACTACC GAAAATGGNC TTCATACCTT CTGTATGATT A

SEQ ID NO:731: (Length of Sequence = 349 Nucleotides)

AGGGATATGC ACAGAAATCT ACTAAATAA CAGCAAAATA AGAGAGCATG AATTACATAT CAAATTATTT AAAGCAAATA  
 ATTTACAAA TTTCTGGAAC AGACAGAAAG CAGATGAGTC TACCAAGAAG GATAATAAAC AATGACACCA GAGAAAAACC  
 ACAACCTGAA AACTTAAGAA AACTGCCATA GAGGTGTGAG CCAGAGCTCC CAGGAGCCCT ACAGTGCTCC AAGCTCAGAA  
 CTGGCAGTA TCAAAGTCAA GAATGCTATG GGGTAGCTAG GCCTCTTGAC TTCTCTTCT CTCTCCATTC ATAGACAAGA  
 AAGCAATCT ACCTTTAGGT GGCCTAGAA

SEQ ID NO:732: (Length of Sequence = 370 Nucleotides)

AAATTGTGTC CTCTAGCCTA GAAGCAATCA AACTCCAACCT GGTGCTGCTG ACTGANCTAC GCATGGATAC GCCATTCTTC  
 TGAGGCCCC TAGACCAACC CCAGGAGGAG CCTGACTTC TGTTCCTCAT TTATGCCCC TTTTCAAGCA GGAAGTAGCC  
 AGAAAGATC ATTGCCCAA ACCACCTAAC AGCAGTTGGG GTGACGCTC CACAGGGGGG AAATGTTATA GGAGTTATTA  
 AGAAATATC TTAGGCAGAT AGAGAGCAAA AGGGGTCTTT GGGAAATTTT TGTTCCTTTT AAAGTAGCTG CAGAAATGTT  
 TCTGTCTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEQ ID NO:733: (Length of Sequence = 357 Nucleotides)

TTTTTGGTG TGTAGAGACA AGGTCTTGCT ATGTTACTAA GGCTAGAGAT CCTTTTAAAA TGTCTTTCTG CTAGGTTGTT  
 GGGCCCTAC CTCTCCTTG TTTCTTCTC CTCTCCAGC TTCTCTGGAT TCCATCTGTT TCTTATACTG AGAAGTTTGC

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TACCTAGCTA GCCCTCAACC TCCTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGTG  
ACAGAGCTGT TAAATGGCAG AGCATGATTG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG  
CCTCGGTTTC CTCTCTNGCA AAACAGAGAT ACTAATG

SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGTGAAAGA AGAGAAGGAA ACCTTGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC  
CTGCCCTGCT CTGTGTGCAT CCTTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCCTT TCATGTCCCA GCCCTGNTC  
TTGGACTCAA CCATCCATTG CATCCCCATG GAGGATTCTG CCAGTCTCA GGAATCAGGA GCAACCCAAG GATGTCCAG  
GGTCACAGGA AGACTTGTG AGGGGACCCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC  
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATTCTACA AGTCACGGTG GGAT

SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

CCCAGCGCT GGAGAGCCAG CCTTCAGGG TGGGCTGGG GAGCCAACT GCGTTCCTGG TGCAGGGCTT CGGGTCTCCC  
TAACAGACCT TATACGCTGA CCGGCGGCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGCGACGACC ACATTCTGCC  
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG  
AGGAATTTTA GTGCAGCAT TCCGCTGTC ACGCCACCGA AATTGCCAGG NCACTCCAAG TCAGAAGGAC CACCAGGAAA  
AGTCAGGAAG AGAACCACCC ATCAAGGT

SEQ ID NO:736: (Length of Sequence = Nucleotides)

ACACTCCTGA CCTCAGGCAA TCCTCCACC TCAGCTCCC AAGGTGCTGG GATTACAGGC ATGAGCCACT GCGCCAGCC  
TACACACT CTTAATAGAA GAAATGAATA ATCAAAAAT ATTATGTG GAAAAATGT TTGAATCTTA TTTTAAAAAT  
AATTAACGNT TTCAATAGGC ATGTTGAACC TTTTTCGGC TACTGTTTC AGCAATTGCA GTTGAATGAG TACAAAATGC  
ACCACAGAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTTCATG TATTGTTACA  
ACNGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

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SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATTC AAACCTTCA TTATACAACG AGTGCATACA CCACTGGGG AGTNTCTGAC TGATGCGTGG GAGGGCGGGC  
GGGGATGTCT NCAGCTATGA GTAGGGAGGA GCGGGGAAG CCTTGGGTGC TTCTCTCTCT GACTGACCG CTGTGTGTTT  
GTCCCAGAG GAAGAGCGGN NGGCAGTCAG CCCCAGGGG GATGGCAGAN TGGAGAGACG GACCTGCAGA AGTGGTGGCC  
AAG

SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCTGCAT GTTCAGAATG  
GCTCTGTACC CAACGGGCAG ACCCTCTNA AGGCCAGGAG CCGCGGGGAG GAGATCTGT AGCCACCTGG TCTGTCTCCT  
CAGGGCAGGG CCCAGCACAC TNCCTGCCA GTCTCTTAC CTCCCAGTIN TGCGGGCAGC TNCCTGCCA GCATCTGCTG  
GTCATTTGCG CTGACAGTC CCAACCAGAA CCCCTNGGGA CTTGAATCCA GAGANGTCTT CCAGGNAACC CCTCAACGAA  
GCTGTGAAAT GAAGAGGTTT CCTCTTTAAA ACTGGTTT

SEQ ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTCTGGC CAGGCACGGT GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCGAGGC AGGCGGATCA CGAGGTCAGG  
AGATGGTCTA GACCATCCTG GCTAACACAG TGAAACCTG TCCTACTAA AAATACAAA AATTAGCTGG GCGTGGTGGC

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GCGTTAGTAT TTCCTTAAAT AACAGGTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC  
 AGTTTTTGT TATGATTTAC ATAGCTGTTT AATTCATTTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAGA  
 TACCTGTTAT TCCCTTCAAC ATCTGCATTT TTCAAGNTT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCTTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATCGTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GGTCAGGTTA CCCACAAGG  
 GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC  
 TTAAAGAAAA GANTTTTCAA CCCAGANNTT CATATTCAGC CAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT  
 ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACINCCAGAC CTGCCTTACA AGAGGTCCTG AAAGGANGCA CTAAACATGG  
 AAAGGGNATA ACTGGTACCA GNCAGTCAA AAACATACCA AAATTGTAAA GGGA

SEQ ID NO:741: (Length of Sequence = 290 Nucleotides)

AAITATTICA TAATAATGTA ATAAACATTC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCITGGCAA TCATTTCTTT  
 GACTCCTCCA GTTTGTGGCT ATCATGATAT TCAGCCCCAA GTTCATCAAT TCTGTTTTTN CTTCIATACA GGTTCCTTAT  
 ATGTATTTCT AAAATCAATT GGTATTICA TCTTTGTAAA AAGTCATTGT NCTATTTTCC CCACTAGTTC TACATTGCAT  
 TCATATTGTT GTGGGTGTG GTAATTCATT NATTTTGACT GCTGTATAAT

SEQ ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTTT AGGAATTNT TTCTATAGAG TTCTTCATTA ACATTTATAC GAGTTTTTTG CTGAGTCAGA  
 TGGACAGTGG GTTCTGATG CTTTINCCIT CCCGCTGCC AGGCTGGCCC AGGCAGTCT CCCACCANTC TATGAGCGIN  
 TCCGGGGCCG NGGATCTGGG CAGCATCCAT GTTGCCGGGG CCATCCCCAG CGGNACCACA AGGTNGCAGC GTTGNTCCAC  
 GAAANACCGN CTTCCGCTC TGCTCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TTGCTTTGCA GTTATCTGGA ACTCCTCGTG CTCCTTCAGG AGCTCCTGGG TGTCCTGTAT ACTGGAGCCC GTGGAGGTGT  
 GTGTGGAAAG GTAGAACTCG CCATGTTCAT GGATCCATTC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CAGGTACTGC  
 TGACACTGGT CCAGCGTCT CTTCCTCATG GTCCAGTAAT GCAATACCCT GTTCTCCCGT TGGAAGAGTT CATTCAGAT  
 ATTTTTCAT TGCTGTTCAG GAGCTTTGAT GTGCGTCACC ATTCTGGCA TGTTCAAGCT TGTTCTGTG CAGGTATTTT  
 AGGAAGACGT CTGCATTNCT CCGAGCAAGN GGTCGAAGCC TTCAGGAATG CCTCCTTINC TNCAGGGTGC GGTTTTCA

SEQ ID NO:744: (Length of Sequence = 359 Nucleotides)

TGCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGCAG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCCGGGT  
 TCAAGCCATT CTCCTGCCTC AGCCTCCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCCAGCTAA CTTTTTGTAT  
 TGTTTTTTTT AGTAGAGATG GGGTTTCACT ATGTGGCCA GGCTGGTCTC AAATCCTGA CCTCGTGATC TGTGCGCCTN  
 GGCCCCCAA AGTTCTGGGA GTACAGGCGT GAACCACCGN GNCCGGCTGG GGCTGCTTAT TTAAATCCCC TAGAAAGAGG  
 GATTCTNCAG CTACACCACA CCGTTAATT NGAGGACC

SEQ ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAAGTTTAT TTTTAAAAA CGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTTACTGT  
 TATTTGCTAA CTCGTAAAAA AAAATTTTNC CCTCACAAC CAACCGCAA ACTCCTGCCA CTTCTAGCT TGGTGGCTGC

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CAGCGTGCAC TGCAGGGAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG  
 TGACAAGCTG CATCTGGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TTTCTCTCNT CCCCTNCACC AGCTCCACTT  
 TTNTCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

SEQ ID NO:746: (Length of Sequence = 285 Nucleotides)

GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AACTAAGAA TAGTAACATA  
 GCTTTCAGCA TCCTGTGCTT GAACATCACA CATCTACAAG TCTTTCAAGN CTTAATGCAA CAGGAATNTG TCTGGAGACC  
 AGCAAGANCA TCAATAGAGA GCACTGNTCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCACAC AACGGATTNT  
 TAGGGGAGGA TTTGGGNGAA GCAGCCCATTT TGCTTAATAC ATTGG

SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGTT TTAGAGTGCT CATCTTTTCA ACTTATTTGA CAAATATTTA CTGAATGTCT GCCATAAGGC AGTAAAGGCA  
 CAGAATGACT CAAAGCCTTT TTNCCCTTAT GGGGTGTAAT TNCTAGTGGT GGAGACAGAC AATGAGCAAG TAAACAATCA  
 ATCGGCTAAT GATAACTACT GTGAAGAAAA TAAAGCAGCN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGTTAGGGA  
 AAGCTTCTTT GAAGACATGG CAGCTATTGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEQ ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC ACTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAAGAA  
 GAATGCTCAG TACGTTTGIN TCTATCAGA AAGAAGAATC TGGAGGTCTT GACGTGTAAA CAGAGTTGTG GGTACCATCT  
 CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCCATTT CCAAGAAGAG  
 AATTGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAT TTTTAACTGA AGTTCAGGA  
 GCATACAAAA AGCCAGGNAA TTTACC

SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAAACTTTA TTTTCAAAAG CTTAAGGCC AAATACAAAC TGAGGTCTTC CTTCTTAACA AATTAATACT AAAATGAAAC  
 AGCTTTTNTT GTGTCCTTAA GACAAAATAA GGAAGGAAAA CGTAGCTGCA GTTGTCCACG ATGGATATTG GTTCTTTAAA  
 ATATATCTGA AAGTAGTAGT CAGAATGANT TATGGTTTGA AAACAGAGGN ATCTTCTGGT TGCAGGTGCA AAGTGACTTT  
 NTTTTATCTT GTCTCAGTCT CTTGATAGC CACTTCATC TGCTACTACT CAACTTTCTC CTAAAAATAC TTCATCTATT  
 TTCAG

SEQ ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTTNA GTAGAGAAGG GGTTTGCCA AGTTGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCCTGCCT  
 CGGCCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TTNAGGAATT  
 CTCCAGGCCA CGAATCTTGG GGCATGCAGC CTCTTCGTA CCCACAGCA TCTNGGGGAG CTGGTGTGCT GATGGGGTCA  
 GCTCTCCAG CTGCCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNACG TCACTGCTTT  
 CTAACATTGC TCATTTGTTT G

SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTTNG CTCTGTCACC CAGGCTGGAG TGCACTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT  
 TCTCCTGCCT CAGCTTCCCA AGTAGCTGGG ACCACAGATG CCGCCACCA TGCCCGGCTA ATTTTTTGTG TGTGTGTTTT  
 TAGTAGAGAT GGGGTTTCAC CATGTTAGCC AGGATGGTCT GGCCTCCAG CTTCTCTGTA GTCCCTTCAT AAACATTGTT

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TTATCTGTGA AAATAATTTG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTGC CTAAGNCTT  
TCTTGCCAAG ACTTTCAAAG CCAAAACTT CANCAGTTTT CCTAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCTGGGGC AGCTGTCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT  
TCGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCGGTGG CCGTGCAGTC  
TTTNGTGTG GGTGCCCCCT TGCCCTTTNT CCGGCTGTTC CAAGCGCTGC TAAGCCTCAT CGNCCCNAG TACTTTNACA  
ANCTGGCGCC CTGNTGGAA GCAGGTGAGT GGCCATCANT CGTGGTCATC TTGNTCAT NATCCAGCT TTGGCCCTG  
GTTGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCTT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTTCAACT TGGAAAGAAG GATGATGCAG TTTTGGGCCC TCCGGCCATC AATNACCGAC AGCNTTTTGA CCTTGGGGGA  
AGCCAGGTAT ATGINTTCAG TGGAGCCAG CTCCTTCTGG TGCTCTGGT AGGCTGAAAA CATCTTTTCA AAATCCTCTA  
GGTCCAGGT CCGAAATACC TGCTGTCTAT CAATCTCAT CCATACGTTG CCAGGGACAC GCTCCTCAT CAGCTTACC  
CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGGACAC GCTTTTCTCT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAAGTAG CTCTGTAGGG GTGAGGAGGA CTGNTCTGT TATCATCCTT  
GATTGINTTC CTTCAGGAG CATGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTGTG  
AATGTTCCAC ATAATGCAA TGCCATAGT TGTGTGAATA TTATGTTGGA ATACAGTCT GATATCTTGG AAAACCATAA  
CTGCTCTTA ATTTAACATA GNGTAATACA TAGTNTCTGA TTTTTTTTAA AGTGAGCTNT AATGGGNAAG TATTTTINAT  
ATGCTTTAGC TATAGCTAAA GG

SEQ ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTCTCCAAGT AGTTTACGGC CCTAGGGCGA AGGTGGCTTT TATTTCTCT  
CTTGGGGAAG GAGGGGGAGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTGT CNCCCCAGC AGCGAGGGGC  
TGGAAGTCT GATCATTCGG AAGGAAGGGT TCGTCTCTGT CCACTTCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG  
GGTCACTCCC CTGGGGGTG GCAGCTCTG CATCAGTNGA GGGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG  
G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TGGCATGGTT GCATGTCCT GTAATCTCAG CTACTTGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT  
TGCACTGAGC CAAGATCGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCAATT TCAAAATAAA TAAATAATA  
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAAT ATTTTAGCAG AAGTAAATAT GGTTTAATTC  
AATGGAACA GCTCTGCTCT AINGAAAAAT CACAAATATT AAAAATAAAC AACTCTACA TTAAACCTCT GAGCACTAGA  
NGCTTACCTA CTATTTCATA GGGCTACAT ACTGTAAGGG GGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCCACTGC CAGGTATACG TCCGGGAAG CCCCCACCC CCTCGNTTTC CTCTCCGCT TTCCCTAAC CTTCTCGCGG  
GGGCATCTAC GNTCTGCTCT CGNCTCTCT CTNCTCGAAC TCCCTTGTG CTGCGCCGT GCGTCTCTGG TACTGCTGGT  
ACTCGGACAC CAGGTCTTTC ATGTGCTCT CCGCTCGGT GAACTCCATC TGTCCATGC CTTNNCCGT NTACCACTGC  
AGGAAGGCCT TTGNTGGAA CATGGCGTG AACTGCTCG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC  
CGATGAAGGT GGCCGACAT

SEQ ID NO:758: (Length of Sequence = 356 Nucleotides)

TTTTTTTGTA TTTCTTTTGT ATATGGGTTA AATGTTTCCG TTATATTTCC TAATTGGCTA TTGCTCGTAT AAATAGATGT  
GGTTTtaggc ACATATTTTA TATCTGGCTC CTATACTAAA AATCTTTTAT CATTTCACAC AGTTTTCAGT TATGCTCTTG  
GGTTTGAAGG TAGACAATAA TGTCATCTAC ACATAATGAT ACTINCTGTT TCNCTTTTTA AATGCTTATA GCTCTTTNAT  
TTTATTTGCT TTGCTTGTGC TATAAATNCT AGAATGAAGT TAAATAATCA TAGCAGATAT CCTTTTCCT GATTTAATTA  
TAATGCTCCT GAAATTTTAT TAAGTATGAT GACTGT

SEQ ID NO:759: (Length of Sequence = 333 Nucleotides)

GCCATGTGGG GGGGGGAGG CGGTGGGTC GGGGGGGGG GACGGTCAAA GACTTCATAA ATAAGAGGCG GGTCCCAGAC  
CCNCAAATTT GTCAACATGT CTTAAATAGG TGCAATATTT AAATCTTATG TACAACAAGA ATCACTTTGC ATAGCAATGG  
TGAGGACACA GGACGGGTGC AGTGATGTGA CTGGGTCTTC TTGTCCCAAG GGGGGGGGG GAGTTCGAG CTCAGCTCGG  
AGCCTCTAGG AAGAAAGCAT CCTTCGTCCG GCCCGCAATN GTGGCATCGG AGTTGACTTT TCCACACGA CGGCATCAAN  
CACAAAGGCA AAG

SEQ ID NO:760: (Length of Sequence = 311 Nucleotides)

CGTCTCTCT GCCCAACCCG CCCCCACCA TTGCCGAGGA GGCTGAAGAT GGAGATGGGT CGGGCAGCAT CTNCGGTTCC  
ACCGGAGACC GCTTGGTGC ATCAGCTTGC CCGCCCCGC CGCAGATATT CCGGCCTCGA GAACAGCTCA TGCTGAGAGC  
CAACAGCCTG AAGAAAGCAA TTGTCAGAT CATAGAACAC ACAGAAAAG CTGTGATGA GCAGATGCC CAGACCCAGG  
AGCAGGAGGG CTTCGTCTG GGGCTCTNTN AGTCAGAGN GAAGATNGAC CACAGATTT GNCCACCACT T

SEQ ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTAAAG AGACAGGGTC TCACTCTCT TCCCAGGCTG GAGTGCAGTG GCAACGATCA TAGCTCACTG  
CATCTCGAA CTCTGGGCC CAAGGGATCC TCCCCTTTG GCCTCCCAA GCACTGAGAT TGCAGGCGTG AGACACCTCA  
CCTGGCTTGT CTGAGAACAT CTTTTAAAA AAATCCCTTC TCTTGGGTTT TCTGTACCC ATATGTCTAC TCAATTTGGT  
TGCTCAGCT TTGTGTGTGT AATGCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

SEQ ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAAGGTAT ATAAAGTTG AAATTAAAAG ACACATATCA TGAAATACT AACAAAAGC TATAATAGCT ATATTAAATAT  
CAGGTAAAT AGACTTTAGG ACAAAGCAT TATTAAGGAA GGGAAAGTTG CTATAATAAT AAAAGGTGA GTTAATCAAA  
AAGATATAAT AGTTTAAAC ATTATGCATA TAATTAAAT CCTCAAAAT AGACAAAGCA CATATTGATA CTTAAGGNAG  
AAATTGATAA ATCCATCACC ACAGTGGGAA ATTAGGAAGT TTCTGTACAC CTCTTTCCT TGTGATAGG TCAAATGGA

SEQ ID NO:763: (Length of Sequence = 369 Nucleotides)

TCCAACTCC TGCCAGATAT AATCTAAAA ATCTGTTGT TAATTTTATT ATTTTATTT TGGATTTTA AATGCTTGGG  
AATTGGGAGA TATGCACAAT TGTCTTGTCT TTGTTACAA AATTAAATGC GTATTTGGGT ACTTATAGGA CACTATTTGT  
AAAAACATTT ATTTCTTCAG ACATTGATG TCTTGTCCCA GTTATTAACA ACATCTACAT GTTAAAGAA AAATTTCTTA  
TCTACTTCT ATTCATTTGA AAATTACCT TCTATCTCC TACTCTGGAA GTCTTTATGN ATTCTGTCT AATCAITAGT  
ATCCCATGTC TTCTTCAAGA GGATGTCTGT CCAGTAGGAA TTTCTCCCA

SEQ ID NO:764: (Length of Sequence = 381 Nucleotides)

CGGGTAGCAG TTGCTGAGTG TCAGCTAGAC AGCAGCGACT AGGGCTCGGG CGCCGGCGAG ATGCCCTTNT TCACCGCCAA  
CCCTTCGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATATG GACATATGTG



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ACAAAGTTGG AAGTACTCCT AATGGAGCGA AAGATTGCCT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCACAT  
 GTTGCTCTGC AAGCACTAAC TCTTCTTGGG GCTTGTGTGG CAAACTNTGG AAAGATATTT CATTTAGAAG TATGTTCCCG  
 TGGATTTTNC AACAGAAGTA CGTGCTGTGA TTAAAAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCTGCTT GATGCAGGAG CTGAGGAGCT GCACAGAAGG TTAAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC  
 TTGCTCCCCA CAGGGAGAGA AGAGCTCTGG CCTCGGAGA AGCCAGACC TGGGAGCTCC TTGAGCCCGG GCTGTGACTC  
 CCTCTTTGGG GCCCTGGTTG GCGTCACTGC ATTGCGCAGT GCCACTGTG GAAGCTGCTT GTNATGCGCC TGGTCCAGGG  
 GGAAGCTGTT TGTTGTGTGC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCC AACCTGGGCA  
 GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCAGTGGCAG GTAGATTTTA TTGGCTGGG ACACACAGG GATACCTCA CCCACGATGG GGTGGGGGGT GTGGTGTGTA  
 AGATATAATC TNATGGTCAC TTGTGGTAGA ATCGGGGTT CTGGCTGINT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG  
 CTGGTAGCTG CAAACCOGAC TTTCCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGGAAG CAAGGAGTCC AGGGGCTGGA  
 TGCAGAGCTT GAGTCGGAGA AGCCAGTCTG CTGGTAGCA TGNNCATCT GCTTTNCAA GGNACGGGCA CCACCAGGCT  
 T

SEQ ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCGCCCCCT TAGTTCCTA TTCTGTCCCC GGTACCCAGG GCATCATAGA CACTCAACAA CCATTCGTTG AATATGCAAT  
 TGGATGAAAT GAATAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTTATGGG  
 AGAAAATTAG GGGAAATGAAA TCCATAGAAA GGGTTTGCTT AAGTNAGAGT GATGACTINGA GCCAGAAGAC ACCCGGGGGA  
 GAGGAATTNT TTCATATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGGG TGGTGGAGIN CAGCCTCGAG GCT

SEQ ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTCTCT GCGTGTAT ATTCTGCAG TCCTTAGTAA CCCCTGTGGC CCACCTCTTA CTAGGTCTC TCCTAACATG  
 TATCTATGAC ACATGATCC CTAACAGCTA TGATCTTCT TACTACTTTN CAGTAATTTA AATTTTATCA TTCTACTGCT  
 TGTTCATATC ATCTCTCTAT GTAAATCTTG ACTCCATAT GAGGTTTTTA ACTTCGAAGG GGTGTGAAGT TATCTGCTGC  
 CTGTGTAACC CCCCCTCAT ACACAAGAGT ACATTTTAAG CACATTACAC CTGAGTGATT GINGTAAAC ACAGATGCAA  
 TCTTTCCACC ATCTCTAGG AATCTTCTG TGGGCTTCC ATTGGGTAC CC

SEQ ID NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCGGGGCG ACGTAGCGC CGAGGAGGCA GCAGGCGCTT CCCCCGGA GGGCAACGGC  
 ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTCG CCCCTGTGA ACGGAACAGA  
 TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCTAGCC AGGGTGCTGA GGGCAAGGGG GAGGTCCCCC  
 CCAAGGAGAC CCCAAGAAG AAGAAGAAAT TTNNTTTCAA GAAGCCTTTC AAATGAGCG GCCTGTCTT CAAGAGAAAT  
 C

SEQ ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGTGATG CCTCCATCTA TGGTTTTGA AAGTCATCAG CCAGAGCTAA GGTAATGAGG ATTCCCTCCT  
 TCATGTTTAT ATGCTTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAAA CCCCTGGCCA ATTCTCCAG GCTTATCGTC  
 TCCCCGGTTT CAGTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTG TTCTTGGCAG CCTGTCTATA TATTNATTT

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ACCTCTCTTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCCCTA  
GACTTCTATC TCTACCTCTC ATCTGACTTG GCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGTT CAAGTGATTG CTTCCTCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC  
ACCACCATGT CCAGCTAATT TTTGTATTTT TNATTAGAGA CAGGGTTTCA CTATATGTTG GCCAGGCTGG TCTCAAACCTC  
CTGACCTCAA GTGATCCGCC CACCTCGGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCCC GGCTAAATT  
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTTC ATATGGTTAC TAATTATTTT  
TNTTTTGTG GATATATCT: CTGGAAATCT ATTGAGG

SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTAAATGT ACCCTTTAAC CAGCAGTTGT GTACCTAGGT  
ACAAACTTTG CAAGCACACA CGCATGINTG TNCCAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT  
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATTCTACA CAGCAATGAA  
AAGGAGCTAG AGCTACATGC AACACATGG ATACAACCTCA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT  
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAAACCCA

SEQ ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAGA AACATCTTCC TATAAAAAT AGACAGAATA ATTCTCAGAA TCTGCTTTGC GATGTGTGCG  
TTCAACCCAC AGAGTAAAC TTINCTTTG ATAGAGCAGT TTTGAAACAC TCTTTTGTGA GTATTTCAT GTGTATATT  
AGAGCGCTT GAAGCCTACG CTAGAAATGG AAATATCTCC CCATAAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG  
TGATGGCTGC ATTCCACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTTCTGT AGAATCTGCA  
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

SEQ ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTTCGCTCT TGTGCCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCTCCCGAG GTTCAAGCAA  
TTCTCTGCC TCAGCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTTGTATT TTNAGTAGAG  
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTGAACTCC TGACCTCAGG TGATCCGCT GCTCGGCCT CCCAAAGTGC  
TGGGATTACA GGCATAAGCC ACTGCGCCA GCCAGAAGAT GCATGATTTC TTAGGATCAT ATGCTGTTTG TAGCCATAAG  
GTAAATCATG TCTCTTCCA TCATGACTTT TGGGAACCTC CTGAATAATA AAAATGAGAG TTGAGAT

SEQ ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTTNICT TTCTGCATCG TTCTGTCATA AAAAGGGGTA CTACTATAGA ATAGAATGCA GGCTTAGGAC CCCCCTAAGC  
TCACTGTTCA ACCCAGCCCA GCAAACCTGG CAGTTATAAA TTTTNCITGCA GGTCCCTGAA ACAACAACAA AAAACTGGAT  
GAGGTTTCCC TCCCATCTTG TTTTATGTCC TTGGGAGCTT GACCTTATAA CCATACGGCG GTACTTTTNC TTGGTCTCTG  
CCATCCAGGG AACCAGAATT TGGGGGGTTA TGTCATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA  
GCTTAAATTT GACTGCTGTA GGNICCTTCT GGGGAAGGAG CAATGGGAAA CCTTNCCAAA GCCTTAGCT CANCCAGCTG

A

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)

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AACACTGGGT AAGCACTTIG TATGINCTGG GCACTCTGCT AGAGATAATG TGTCGGGAAT TGGTGGGTC TTGGTCTCAC  
 TGACTTCAAG AATGAAGCCG TGGACCCCTG CAGTGAGTGT NACAGCTCTT AAGGTGGCGC GTCTGGAGTC TGTCCTTCT  
 NATGTTTCA TGTGTTTANA GTTTCINCT TCTGGTGGGT TCGTGGGTCT CGCTGGCTCA GGTGTGAAGC TGCAGACCTT  
 TNCGGTGAGT GTTACAGCTC TTAAGGCNGC GCGTCTGGAG TGTTCGTC CCCCCGTGG GCTCGTGGTC TCGCTGGGCT  
 CAGGAGTGAA GCTGCAGATC TTGCG

SEQ ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCCAAGCCCA NTAATGCTAT GGCTGTGCA GACTTGTAGA GGTACTGCCT TCATGGTCTT NGGTAAGATC  
 TGGGAGAATT CCTGGGATTA CCAGGCAGAA ACTCTNATTC TCTTGCTTA CTCCCCCA AACAAATNAG TCCTCTCTC  
 TCCTGTCTT GAGCTGCTA GAGCTGAGG AGGGGGTGAC ACAAGCACAG CTATGTCACC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

CAGAACTCA GGAATAAAGC CATTAACTTT CAAAGAATAT GTTGTGTGT TCGATATTTT CCATTCTTAA TCCACATCCA  
 CGTTGGTCAA GTAGAGCTTC CTACTCAGAA GCACAGCAGT TGCCATGGTG TTCTCTTCCA TCTGAAAGCA GCAATTTTCC  
 GCAGCGTCCA TTTACAGAAT GTGCCATATT TACTCAGATT CTAATGTATA TTAATATGC TTTGGAAACT TAACAAGAAA  
 CGTGCAAGCN CTCAGTAAAG AAAAGTTGTA GAAACAAAA ACTGAACAGC AGGCTTCTAG TTTCTCTCTT CCAAAATGG  
 CCTTAGTGGG ATTCAAAAAT GGAAGTGTG AATAAACTG C

SEQ ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTTAT AAGGCAGAGT CCAAACACAC ACTTAAGAAT  
 GACTTACTCC TCTGGCGGAC CCCACCATTC CCTCACCCCG CTTTGGCTCT GTCCCTCTGT GGAGCTGCCC CTGCCCCTAA  
 ACACTGCTTC CTCTCTACCA ACCCGGACCA TATTTCCCTT CCTCCCCCA CCAGGTCCAG CAGTACCCAC CAGGTTTGTG  
 GACATCTCCC CAAGGAGCTC TCACGTATCA GAAGCAAGGA GTTAGCCTTC AGCCCCACCT CTTGTGCTTA GGTCTACAGT  
 GAGTNTCCAG TGATGCTTCC TACCGACTGC TTGGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCGG AA

SEQ ID NO:780: (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGCGGANT  
 GCCTGGTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATAT CCTTTGTGAG AGGTAAACA CTTGAGTTAA  
 ATTTTGGAGG CCAGGTGTGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GGGGCCAAGG TGGGCAGATC ACGAGGTGAG  
 GAGATCAAGA CCATCTTGC CAATATGGTG AAAACCCGTC TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA  
 CGCTGTGGG TCCAGCTAC TTGGGAGGCT GAGGCGGGAG AATCGCTTGA GNTGGGGAA GTGGAGGTG CAGTNAAGGT  
 GAGATCGGC CACTGCATN CAGCCTGGGN TGAGAGAGCA AGACTTCCGT TTC

SEQ ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTCG GGAGGCTGAG GTGGGAGAAT CGCTGAACC TGGGAGACGG AGGTGCGAGA GAGCGAGAT TCGCCATCA  
 CACTCCAGCC TGGGCGACAG AGTGAACTC CATCTCAAAA AAAAAAAAAA AGAACCACCA CTNTAACTGA GAAATAGATG  
 NTCCCATTA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCACTCATG GTTTCCCTTT  
 TAAGGGCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACCTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GTCTCGGGCT CCTGACCTCA GGTGATCTGC CTGCTCGGC CTCCCAAAGT GCTGGGACTA CAGGCATGAG CCACTGCACC  
 TGGCTTAATT CTACATTTN ATCTACAGCA GACCTTTTAT CATAAAAGAG TTTCTATAAA ACAITTTCTCA AAAGAAAATA

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TGTATTGACA TTCTATTTTC TTCTCTCTCC AGATACTATT TTTNGGATTT NAAACATACA CAATACTTAG GAGACTTGTG  
 TTACTCAGAG TGGAAAATTT TNCCAGGGAC AAAGTCAACA CAANGAAACA AACAACAAAA AATAGCCAGA AAGAGAACAG  
 TTAAGTGCAG CTCGGTGAGT CCCGGCAGTT CCTTCCCGGC ACTGGCTCGT CCCTGGGGTT CTCAAGGTTT CATGCGGCCA  
 CAGCGTCCGT CCACCTGTTT CACGAGAGCC ACATGCTGGA ATT

SEQ ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTCAGGCC GGGCACAGTG ACTCATGCTT GTAATCCAG CATGNTTGA GACATAGCAG TAGGGACTAT CGACAAAGAA  
 ACACACAGAG GGA AAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC  
 TGGGTAACAT GGTAAACCC CGTCTCCACT AAAAATACAA AANTTAGCTG GGCATGTGG CCTGGGGCTG CAGTCTCGAC  
 TACTTGGGAG GCTGAGGCAT GAGAACCTCT TGAACCCGGG AGGTGGAGGT TGCAGTGAGC AGAGGTCATG CTACTCTCAA  
 GCCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEQ ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTGCA AATTACACAT GTGAAAAGCA GTTAATATCA AAAATATATA AGANACTCAA  
 AGGACTATAC AACAAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANINA TTINCAAAGA AAGACATACA  
 TATAGCTTGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAC CAAACAACCT CTAAGATATA  
 AACTCACTCC TGTAAANTG TTAA

SEQ ID NO:785: (Length of Sequence = 363 Nucleotides)

GTAAAGNTTG AGAAATCGGA TGGTTCCTGT GTCTGTGTAG AAAGAAGTAG ACATGGGAGA CTTTTCATTT TGTNCTGTAC  
 TAAGAAAAAT TCTTCGCCT TGGGATCCTG TTGATCTATG ACCTTACCCC CAATCCTGTG CTCTCTGAAA CATGTGCTGT  
 GTCCACTCAG GGTAAATGG AAAAAAAAAA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTTTTTTT TTTAAAGACA  
 GAGTCTTGCT CTGTACCCCA GGCTGAAGTG CAGTGGTGAG ATCTTGGCTC ACTGCAACCT CCACCTCCA AGCTCAAGTG  
 AATCTCCAT GCCTCAGNCT TTCAGAGTNA CTGGGGATTA NAA

SEQ ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TGCTTTTAAG GATTTAACAG ATAGTAAAGA TAAATGTGAG TNITAAGAAT GGGATTTTTA  
 GACTAGGCTG ACACAAGGGA TCTTCTTNA ATAAGNCTT TGAGCATTTG TTTTTTTGGA GTCATCCTT AAGGGCTGGA  
 CAGGAAGAAT CCTGTGTTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG  
 AGAAATGCAT GAGTGATTTA ACGCACGGNT GGGTGTAGTC ATTATGTTCC T

SEQ ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTTCTGTA TAATTTTINAT TATGACCATA AAAATAACAA TGATGCAAT AACAATTAA TTGTACATTT TAAATAATT  
 AAAGTATATA ATTACACTGN TTGTAATAAA AAGTATAAAT GTTAGAGGTG ATGGATACCT TATTTACCCT AATGTAATTA  
 CTACACATTT TAGGCCTGAA TGAAAATATG CCATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT  
 AATAAATTTT AATAAG

SEQ ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGTTTTGAG TCAAAGCAGA CGGCAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC  
 ATTACAGACA AAAAAAAAAA AAAAAACAGA GTGAACTAG ANCTATTTTC AATAGTAGTT TTCTGACAGC TATATAANCA  
 AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTGTGTCATG TATCCTGCCT GCCAGCAAAG GTAGAGATGG

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CTGTATATTT TGTAATGGTT TACTATGAAG GCTGTTCAT AACCTNCAAT ATCCACTGNT CTGGGTGGT ATACCAAGGA  
TA

SEQ ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGTGGC AITTTGTTTT NTAGAAAAC CCTTAGTAA GCCTTCTCT AACCCAGAAT AGACACTGGG TATCCTCCAA  
GAGTCCATA GCTTTCATTT CATCTTCAC CCTTCTGA GAGGGGAGG CAGGGGATAG GGGTGTGTC AGGCAGTCTC  
CAAAATGCCC CTCCTAGACC CCTGAGAGAA TTCATGTGC CAGCAATAAA CCAACAGCAC CTCAGTGGG CATCANAGGG  
CCTCTAGGC TCAAGGCTAT TGCCAAAGGG CATTCCTGTT TTATGAGCTT CACGATGGGA ACCAAGGNAG GCTCTGCAA  
GACTTCTAG GGGCTTGGTC CTCAACTTA TGGGCCT

SEQ ID NO:790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGTCTGAAC TOCTGACCTC ATGATACACC CGCCTTGGCC TCCCAAAGTG CTGGGAATAC AGGCGTGAGC  
ACTGCACCCA GCCTTGTGTG ATCTTTTAAA GTACAGTCC CATAGATTTA CATTAAGAAT AAAAAAGTCA TGACATCTTG  
CTTTTATATG GCAGTTTACT CAAGCTTTT AAAGAAAGAG CATTCACTT GCTTTTACGT GGTTTTAGAA TGTTGAAAAC  
CTTTTGTAA ATCTGAGTAA TTACTGCAT TTNCCATTAA TTCAGCTTAG TTAGACTGCT GGTCCAGTG CTTTGTTTTG  
CTGTACATA TACCCTAATA TGCTTTTAA CATATGNCCA AATTCC

SEQ ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACCCA ACCATAATGG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA  
GCCTAGCAAA TCTCCTGGAA GTCTGCGCTA TAGTTACAAA GATAGTTTCG GGTGAGCCGT GCCACGAAAT GTCAGTGGCT  
TTCTCAGTA TCCTACAGGG CAAGAAAAGG GAGATTTTAC TGGCCATGGG GAACGAAAGG GTAGAAATGT AAAATTCCCA  
AGCCTCTGC AGGAAGTGCT TCAGGNTAC CACCACCACC CTNACAAGN GATATTCTAG GGGGTACTCA AGAGCAT

SEQ ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAATT TGTAAGAA TCTTAACTT TTCAAACATG TCACAGGTAG TACTTGAAGT ATGCTTGGTA  
AAATGTACCG GTTAAAGCAG TATGTTCTC AGATAGCCTG AGATTTTATT TAACAATTAT GTATCTAAGT CTACTAATAC  
ATTTGAGCAA AAGAGTGTG GGTNCATAAA TAAGANGTCA GTATTTCACT TAGATTATT CAGAACTTG TAAGTNCCTG  
TAAATAGCTA CTCGTAAA

SEQ ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGTCTCTCT ACTTAAAAGA AACATTTTAG GTTCACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT  
CCCTTCCCC CCACCAATAC TCTTTCCCC AAACCCGTC CCCACCGNC TCTATGTTA ATTGAATTTT TATTGTGAT  
ATATAGAAAA CCTAACCCAT GGCTGTATG CTGAGTGTCA TTTGGCTTCA AGCTGAACC AGGGAACAGC TTGGCCTGGA  
ACCTGAGAC AAGATGCTGG CCTCANAAGG TGGGGCTCA CG

SEQ ID NO:794: (Length of Sequence = 330 Nucleotides)

GTGAGGCTG CAGGGAGCCA TGTTACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTCTCGG CGTGAACCCA  
GGGGCGGAG TTGAGTGTG CCAAGATCGT GCCACTGCAC TCCACCAGCC TGGGTGACAG AGCAAGACTC CGTCTCAAAA  
AAAAGTTTAC TACTCGGCTT TAATTATTTC GTTTCGGTTT TGGGTGAAAT NATTTTATTA CTGACTGGTT CCTTAGTTGT  
ACAGAAGCCT ATTATCTTTA GAGAGACTCT TCATGGTAAT TAACCTAGAT TCTTATTTT CTTGGGTGAA AGGANGGCAA  
GTGGATCTAA

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SEQ ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAAGTATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA  
 TAGGTATATCC TTGGAGAGTA TCCAGGGATG TCTCTTTNCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC  
 AGAAGCAGAA AT

SEQ ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGGA CAGCCTGANC TCCCTGCTCA TAGTAGTGGC CAAATAATTT GGTGGACTGT GCCAACGCTA CTCCTGGGTT  
 TAATACCCAT CTCTAGGCCT AAAGATGAGA GAACCTGGGA CTGTTGAGCA TGTTTAATAC TTTCCTTGAT TTTTTCCTTC  
 CTGTTTATGT GGGAAAGTTGA TTTAAATGAC TGATAATGTG TATGAAAGCA CTGTAAAACA TAAGAGAAAA ACCAATTAGT  
 GTATTGGCAA TCATGCAGTT AACATTTGAA AGTGCAGTGT AAATGTGAA GCATTATGTA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAAA GTCTGAACTG TATTCTCATA  
 GAATGATTC AGGTTTCAGG GTGTTCCACC TGCCAGAACC CAAACTACA ACTATGGGCG ACACAAGGGA AGTTTTAGAA  
 ATCTCCCTCT ACACGCATTT CTGGTTTTCT ATTATTCCTC CATGGCAGCT GACAGATCTG GAAAGTGNAA TAGGGGATTC  
 TCAAAATCAA AGCCANGAAG ACACCTTGTG TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TTNGNCCAG  
 GCATTTGCTG GGAACCT

SEQ ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCCCTGA AGGTCTAGGC TACAGTGAGC CATGTTTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC  
 TCCAAAAATA ATAGTGATAA TAATAATAGT CATTTATTTT AAGTCTACAT GCTGAGATGC CAGAACAGT AAAATTGGAT  
 TATAGATTCA AGCAGTATGT AGGTATACIT TCATAAACTG AATACTGATG TAATTTTGGA TGATTAAAAA CAGNCTTTTA  
 GTAGGIGTTC AAAAATCTGG NTAATTCCTT TCATGNCATT CAAACATTTA GGTGGCCTGT CTTTGTTTTT TTAGGNTATA  
 ACTTGCAAAC ATTCANTTGT T

SEQ ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CTTTAGTATA GCAGAATACT ACAGGTTACC CAATTTTAAC CCTAAAAACA  
 AACAAATGAC AGGCACCTCA GTGAAATAAC AAGCCCATGT TCAAAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA  
 ATATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCAATGATG CAAAAAGTAA AATGNTCCAG  
 TTTAAGCTAA CACATTCCTT GTTATACAG NTTATTTTNC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA  
 TG

SEQ ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGTT GTGTGGTCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTTTTN CAGCATAGTG GAAAAGAAAG  
 CCATGGNTCT GGGCAGGTCA GGGTTTGANC GCTAGTGCTT TGTATTAAATG ATCATGATGA TAGCTAGTAG ACAGGGCTTA  
 CCAGATACTA GGTGCTCTCT TAACTGCTTT ACATATGTA GTTAACCTCAT TTAATCTTCA TGACATCACC CCTGAGATAT  
 GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTTGC ACAGATTACT CCAGCTTAGT TCATAGCAGA  
 GCTGGGACTT TTAATCAAG GCACIAGATG GTTCAGAGC TTTGTACTAC TCTTCCTGGG TCTTTCACAG TCTGAGCTGG  
 TCCGG

SEQ ID NO:801: (Length of Sequence = 408 Nucleotides)

CTGCGTTCCA TGTAGCGTCT TCACAGINC TCIGTTATAA GATGGTTTGT TACATTGCTG CAGATATTTT TGCATGTCCTC  
TTGAGTTTCT CAAGACCAGG GTTGTATTTT TCCATGTCTG TCGATGAAAC AGTACATGAC AAAAGAAGGT ACTTAATACA  
TGTTTGATAA ATTAATTACT GTTGGTAAA TTAATTATTG AAGGAAGACC CAGACTGGTT CTGATAAATC ATTGATTACA  
TTTACAAAT TTGGATAAAT TAGGGGAGCC TTGAGAAGTT AGAGCTCTAG GGAAGGTTCC AGGGAAAGTT TGAAGGATGT  
GAAATATGGT TTTCAAAT CATAGTTTAT TGCAGGATTC TGGNATACIT TCCCAAGTGA GGGGNAAGAT GAGGAAGANG  
ATGGGCTT

SEQ ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCACTATCA TAAGAATAGC TTGGGAAAGA CCCACCCCA TGATTCANCT GGGTOCCACC CACAACACAT  
CAGAATTATG GGAGCTACAA TTTAAGATGA GATTTGGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTTGNCITC  
TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCG CACCCATGAA AAGATTTAGA GAGTCACACA  
GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCCCTGGNCT TGCATGTCTAT TAAGTGGTGG GNTCCITCAG CTTTCACATN  
TTCAGGCAGT GGGGTCAAGA AAC

SEQ ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGGCCTT NICTAAGGC ATGTATGACT TGCATGANCT CTCTAAAGCT GAACTGGCCT CACCTCANCC TGTCTTGCTG  
GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GTNATTACCT GGTCGNTGAA GAAAGACAGA TGGCAAAATT  
NATGCTGTT GGGGATGACA GC

SEQ ID NO:804: (Length of Sequence = 312 Nucleotides)

TTTATTTACT GCGTGTGTA ATNATCACA AACATATTCA TTGTCAAGTG AATGCACAGG CTTTCAAAGG TGATTGTATT  
CTGCAAGGTG GGAATAGCC AACTACCTTC TAAGGTGAAT GINCAGCCTG CCATTTCOA CCCAAACT CCTCTAGATT  
CTCAACAGGG CAGCTCTGC TTCATGCCTC TMTTCGAAA GGTGAGCCT GTGTAGAAGG CTTAATACCA ACATGCAGAT  
CCACTGAGA ATCACTGGAA TGCTCTGGAC CCAGCTGGAA TGCTTCOGGA ACCCAGTCAG GCTTNOGGAA AT

SEQ ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAAATATA AAAAANTGCA GGGCCTGGTT GCCACATAC ATTCTCAGG TTAAGGTGGA TTTAAAGATG  
CCCAACAGAA CCCAATGAAT CAGAAGCTAA AAGGGACACT TCAGTGATCA GCAGACGCAT TCTCTCACGT AACAAATGGA  
GGGAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GGTGCTATTT  
GCAACTACAT ATATTTAAAA TACANGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTTAAACAGA NCATTTCAAG  
ACTGCTACAC AGAAAGGGAA GGAAGCTGT TAACCCAGCA CAGCAGCACA CCTCACATAT TTCCGTCTCA GAGGTAAAT  
GGGAAGGAAG G

SEQ ID NO:806: (Length of Sequence = 287 Nucleotides)

GCATTINAGT GCTGATACAG ATACAGTGAG TTCTGCCCT TTCTCTCTCT NTATATTGAA GGGATTATAA ATGAAGCTCT  
TTAAACATTC TGAGATCINT AAGTTGATTT CTACATGAAC TCCAAGTGGT GTTAATGACA TTTTCAGAAA AGATGCTTTA  
CTTAGCTGAC AAGAAAAAGT ACTCTGTAAG CCTTTATTIG TATGTGATAA AACAGAGTTG ATAAAATAAT CTACTATTAA  
CTTATCAATG CAGTCITACA GAATCCACCT ANTTACAAAG TAGATAA

SEQ ID NO:807: (Length of Sequence = 369 Nucleotides)

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GGCAGATATA ACCTTTTCTC AAACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TTTATTTTTG  
 TCTTTGGGA CTAAGTGCCT TACTTAGTTT TGTCAGTGT ATTCATTAAT TGAAGAAATA CTTATTCAGG ATTTCTATTA  
 CTAGTTTTG CTCAATATAT TACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT  
 ACAAAGATAC AACATGAATC TGAACTCAA TTTAATCTAG AAAGATTTAT TAATATAANC TCATCAGAAA AGCAAGNCAT  
 CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAGAG AGAGCAGAT

SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTTGT ACCAGCCGCC ATACTCTCCA AAAGATGTCC CATCCTTTTN CTTTCTTTTG CATTCTTCTC TTTCTTCAGC  
 ATGCATCCAG ATGGGTTTAT TTTTCATCATC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA  
 GTGTTTCTGC TTGCTTGAAC TTTCTTGTGTT TCAAAATAGCA GGATGCCAGG TTATTTTNCG TCTTAGCCAC GTTGGGGTCA  
 TCAGGTCCCA GTTTGTCTG GTAGATCTCG AGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTCTT  
 GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

SEQ ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TTCATGTCCA GTGAGCAGTG TTGCGTTTTT CTTGTAGCA TTTGGAAATG ATTTACTGGA ATTACAAAAC  
 CTATTTTCCC TTAAATTTT AGCTTTGGCT CTGGCTGCTT TTTAGAATAA TGCAAGATAA AAATCACACC TGAGGGCTGA  
 AAACGGAGAG GGAATGGGAG ACTTGATATT TAAGCAGCTT GAATGGTTTT CTTTNCCTTT ATTTTAAAG AAATGCACCT  
 GCCTATGATA CTGTCTCTCC AGTGAAATGA TTACTCTCTC ATTACTCTAT TGATACANTA TTGTGCATGC TAGTGTGTGA  
 TTTCTATACA GTAGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGTCAATG CTTCCAGGC TCGAGTTGAT GCCCAGAGT GTATTGTACG AGCATTGAAA GATCCAAATG CATTCTTTTT  
 TGACCACCTT CTTACTTTAA AACCAGTCAA GTTTTTGGAA GCGAGCTTA TTCATGATCT TTTAACCATT TTTGTGAGTN  
 CTAAATGGC ATCATAATGC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACCTG GCCTGTTACA TGAACAGAAT  
 ATGNCAAAAA TGAGACTACT TACTTTNATG GGGAAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA  
 GAGGACGTTG CTGTTTCCAC TGGCTTCTAA TTTTGAGAT GCAATGAGCA CTTACGGCTT TTGCAGTGGT TCAGGAAAAG  
 GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCCCTCTGAT GGCTGCATGG AGCCAGCGGT GCTGTGACTT TTTTAAATAG  
 CTTCACTACC TTINATACGT ATGTCCTTAT TTACTCTTTA TCTATGCTCT CTTCTCTCCA TCAGCCTGGG AGCTCCCTGG  
 GGCAGGTCTG TTTCTCCCT CCAGTCCGGA NTTGCGAGGA GCTGTGCCCT CCCCATCACA CTTGGAGGCT GTCINAAGGC  
 AGGGGCTGTG GTCTCTGCCA TTAGACTINGA AGCTCCCCAA GGTAAAGGT CATATCTCTA AAAAAGCTTA GAATAGCTTA  
 GGAACCTAGG GGT

SEQ ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTCACAT ACTTGTAAGT NATGCAAGCA AATTCACACA TAATTATTTT TAAATGCTAG ATAGTTGGTA TAATTNCAAT  
 CATTTTAAAT ATGTTAAGAC TTGTTTGTGA CCTAACATG AGGTCTATNC TGAAGAATGT NCCATGTGCA CTTGAGAAGA  
 ATGACTGGAG TGTCCTTTAT ATGTATGTA GGTCCAATTA GCTTATAGAA TTGNCCTAGT CCTCTATTTT CTTATTCANC  
 TTTTGTGTGG TTGTTGTTCT ATCCATTATT AAAAGTGGG TATGAAGTC TCCTACTATT ATTGTGCTAT CATCTCAGC  
 AAATAACAC AGGANCA



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SEQ ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGTGGCCTC AGNNCAGCCA AGCTGACCTT GGCCTTGGC TGGCTTCTINT AAGGCANTAG AGTGCCACCA CATAAGCNCA  
 CCACCTINTC CCACCTCCTC CCTTCTCTCC CATGCCACCC CACTTGCTTC CAAGGGCTTG GTTCCAAAG TNACATCCAG  
 GGTGTAAGAG GTTGGGGAAA ACGTCCTGCA AGNTGGCTCA GGGATCTNAT TCCATCAGAT GGTCTCATGA ATACTGTGGG  
 AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNINA GGTCTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTTGAGCC ATCAGAAATC AGCTTTTGTA GATAAAGAAT ATGAACTAAT TGACTATGGA TGGAAATTATT GTATATAGTC  
 AGCTTGCTGA ATTATTGGIT AAGCACTACT AACTATATCT TGGTAACTA TGGTGCAACT GAGCCACCC CTAAAAGCAA  
 AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAACCAA TGAGAGCCTA TGAGANTGAA ATGNTTTCAG GTGGAGTTTG  
 ACAATACAAT TCATCCNTAA TATATAGGGN NAAATATTTT CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT  
 GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTTNACT CTTGTTTCCC AGGCTGGAGT GCAATGGCAC GATCTTGGCT TACCGCAACC TCCGCTGCT GGGTCCAGC  
 GATTCTCCTG CCCCAGCCTC CTGAGTAGCT GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTTTIG CATTTTNAGT  
 ACAGACGGGG TTTCACCATG TTGGTCAGGC TGGCTCGAA CTCCGACCT CAGAGGATCC GCCACCTTG GCTNCCAA  
 GTGCTGGGAC TACAGGTGTC AGCCACCACA ACOGGNCTAA TTAATCTTC TTGAAATTC A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTTTAACA TATTAAAATA GACATGAGAA AAATGTGTCA TTTGATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA  
 ATATAAAAT AAGCCGTATA TGCNCTTAAG TAAATCGAAT CTAGGCATCC TTAAAATGTA AAAAAGGNTG CAACAAGAGT  
 AAGNGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTGA AGAAGCAAAG  
 NGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAATNCT CCTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

TGGCATGCGC CTGTAGTCCC AGCTACTCAG GAGGCTGNGG CAGGAGAAIN CCTTGAACCC AGGAGGCAGA GGTGCGAGTG  
 AGTCGAGATT GCACCACTGT ACTGGTCTCA GCTTAGGCAA CAGAGCGAGA TTCCATCTCA AAAAAAAAAA AAAGTTAAAA  
 NTAATATGCT AACTATGATA CAACTGATA GCAATATTGT CTTTAGATTG AAAATAAAAA TAGGG

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTTC ATTACCTTTT TGAATAATGN CATACAAAAA ATGTATTTGN TTTTGTGTC TGTGAGAAIT  
 GATGTTTGTA GATTATAAT CATTTTGTIT AGAATTACAA AATAGTTTIT AAATATTGTC TGAGAAAAGC CAAAGTTAAT  
 GCAACCNAGT GGAACTGTA AGACNNTTG AGTATTGTTT GTTTTATTGG ATGCATTGG ATTTT

SEQ ID NO:819: (Length of Sequence = 280 Nucleotides)

TTGACTAGCT TCCTACGTCA TTAAAAATTC TTTAAATAGT CTGTCTTAAT GGCTGCAAAT TTGTGCTAA GTCGCGGCTA  
 AAATCTGATG AAATGTTTTA CCTGTGGTTA AGTAATTTAG CAACTCGTAT CTTTTTAAAA TATTACAACT GGGNATTCTA  
 GTACGTCACA AACATTGGIN ATATCATTTA TTTGTGCCA TGTCTGTGC TATGAAATAC AGTAGAATGA AAATTTACTT  
 CAAAGCATTC ATINTCTTCC CCCAGGNAT GATGGCAAAA

SEQ ID NO:820: (Length of Sequence = 328 Nucleotides)

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CCAGTTAATT TTGTAAAGTT TATAGNGATG GTTTCAGTTA GACCTGTGCT GTCAATACAC TAGCAATTCA CATGCACATT  
 TAANTTTAAA TCTAAGTTTA AATTTAAATT AAGTTAATAT TAAATAAGAT TTGAAATGCA ATTCTCAGTC CTACAAGCCA  
 TGCTTCAAGT GCTTCATATC CATGTGAGGT TAGTGGCTGC TATACTGGNT AGTGCAAAAA GAGAACATTA TTGTAATCAT  
 AGAAATICTA TTGGTAAGTT TATGGGGTAG TACATGGACT AGAATGTAGT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG  
 NCACTGGA

SEQ ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATGTG TTCTGTATG TMTTGAGATG ATTATTTGGT TTCTCTTTT ATTGTGTAA TTGGTGAAT TGCATCANCT  
 TTAGTATCTT AAACCAACCT TGCTCTCTA GGTAAACCT TATGTGGTCA TAATATATAA NCCTTTAAAT ACATTATTGG  
 ATTINCTTTT TTAATATATT GCTGAGGATT TTTCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACTTG  
 TAATENCTTT GTTAGAAGGA GTTATATTA GGNITATNC TGGCTCATA AAATGGGTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATTGT NTCTCTGCG AGCCCTGAC CCGGCTACT CTTCACCAGA CACGGCCCGG CTTGGCCCA CAACACAGCC  
 GTCCACCCC TGGTTCCTTC ACCTTAGCAG TAGCAGTAGC TCTGGGTGGA GTTCCAGAG GAGCTGACAG GCCCTCTGCC  
 ACTGCTGCCA CCCCAGGGC TAGGGAGGA ACAAGAGCC TGCTTGCTGT GCTGCACAT CCAGCATGCC ACAGCTGCAC  
 TACGGAGAGG AGGTCAGACA GTCCCCCAA CAAGNCCCG ATCCCTCTNC TCTCCACCAG GGAGGGCCCT GGGCTTTGCG  
 CCCACAGTAC AAAACGTTCC ANCCCGGCT GATCATTCTG GGTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CTTGGGAAA ACCAACGAAC AGTCTCTCA CAGCCAAAT CACCACAGTA CTCCAATCCG NAACCAAGTG  
 CCGCATTAC AGCCCATCAT GAGCCCTGGG CTNCTTTCTC CCCAGCTTAG TCCACAACIT GTAAGGCAAC AAATAGCCAT  
 GGCCCATCTG ATAAACCAAC AGATTGCCGT TAGCCGGCTC CTGGCTCACC AGNATCTCA AGNCATCAAC CAGCAGTTC  
 TGAACCATCC ACCCATCCCC AGNGCAGTTA AGCCAGNGCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCTGAGGT CAAAGCTGCA CGTGGGAAG AGAAAGACAA GGAGACCAAG AATGCTGCCA ATGCCTCTNC ATCCAAGTCG  
 GCCAAGACCG CCACTGCAGG ACCAGGAAT ACCAAGACGN CCAAGTCATC TGCTGTGCCC CCAGGCCTCC CTGTGTATTT  
 GGACCTGTGC TACATTCCTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTCAA GAGAGTGCGG TCTTCTACT  
 ACGTGGTGAG TGGGAATNAC CTTGCTGCTG AGGAGCCCAN CCGGCTGTC CTGGGACGCT TTNTTTGGAA AGGAAAAGGC  
 TCACT

SEQ ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATTC CTCCACCCCT ATTAGCAAAT ACCGTAATAT ATGNTCTAG TAATCATCCT CTCACAATTC  
 TNCCTTTCTT AATTTNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC  
 AGAAATTGTT AGTCTCAAC TCCAAGGTCT GCCTGTGCAA GCCCTGTTN CCGTGTCTC ATAAACCTTG TCAGGCATTT  
 ATTATTCAG CACATATCTA CTGINTCTG CACAAGAATT CATAAGGTTT TGATGAATTA TGTCCCTTCT GAGTGGGA

SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTATAGGG TGINATTTT TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAAACC  
 ATGAGAAAAC TAACANTTTT ATGGTGATTG AGAGGTCCA AGTNCCTGGN GTTTTAAAAA AATCAGTTT TAAAGATAAA

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CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCACGGTGG GTCTTGAATA  
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEQ ID NO:827: (Length of Sequence = 426 Nucleotides)

TTTTTTTGT TTTGGGACAG AGTCTCACTC TGTCACCCAC GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA CTGCAAGCNC  
TGCCCTCCCGG GTTCATGCCA CTCTCCTGCC TCAGCCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT  
AATTTTITG TATTTITAGT AGCGACAGGG TTTACCGTG TCAGCCAGGA TGGTCTCGAT CTCTGACCT CATGATCCAC  
CTGCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGCGGATGG TTAAACATT TTAATAATA  
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAATC CTATATGCTT GCTGGTGGG AATGCAAAAT GGGTACAACC  
ACTTTTGGGA CAAACAGTTT TAGTAA

SEQ ID NO:828: (Length of Sequence = 402 Nucleotides)

GGCTGCTGC TCCACTCAA CAGGTATCTG GGAGCCAGCA CTCTGGCAGT CCTCTAAGC TCTAACTCTG GTTTTACTGT  
TTTNNAGTIG AAACCTTGT CCTGGGAAT AGTCTGGCCC GCTCCTTGA ACCACACTCA GACTCAATGG ACTCTGCCTC  
AAATCCCACC AACCTGTCA GCACCTCCA AAGGCACCG CCCCTGCTT CATCCTGTGG CCTCCACCA AGCACTGCCT  
CAGCTGTGG CAGGCTATG TCCAGGGTA AGCTTACCAG AGTCTGGCC CTNCTCCCT CCTCACTCT TTCTTCACT  
TCTTCTGA GCTCTGGGAG GCCAGAGAG ACCTAGCTCT GTTGCCTCT GNCINGTGT GGGGACTAGG GACTGGACTT  
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCGTTAGG AGTCGGCTTT ATGTGGGAAG AGAGAAAAA ACTTGGTGAA ATGCTTCTG GACTAATTGA AGAAAAATGT  
AAACTACTTG AAAAATTTAG CCTTATTCCA AAAGAGTATG AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT  
TGAGAAGGCG GCANAGAAGC ACGAAGTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGACGATGA  
AATCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AAACACTCTC AACAAGATGA ACTGATGGCA GATATTTCAA  
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAT CATCTNGCA  
AGGTTCTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGTTTGAGAG TAGAACAGGA AGTTGTGAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGNTCCC CAGGCAGGAC  
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCCAGCACT TTGGGAGTCT  
GAGTCGGGTG GNTCACCTGA GGTCAAGAGT TCGAGACCAG CCTGACCAAC AGGGTGAAAT CCTTCTCTA CTAACTACA  
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAAT TGGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTTA  
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGCGAG CCAAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGGAGT  
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTTACAG GTTGTGCTT CTGAAATCTG TACCTTCTTA CTCATAACAT TTAATGTAGC ATTTCTCAAC CTGACCAATC  
TGCAGAAAAT ATATGTCATA TATTAAITGT GTATACATGA ATATATGCAT TTTCTGGTA AAAAGTCATA GTTTTNCATA  
GATGTCATGT AATCTTTTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTTAGA  
TGAAAGGGAC CTCAACAAGC CTCTTGAGAT ATGAANCATA AAGAGNAAAT ATAAGCCGCA ACTTTTGTAC ATGACAGATT  
CATAATGGTT

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SEQ ID NO:832: (Length of Sequence = 402 Nucleotides)

CIGTTTTCTC CTTTGTGTTT CCTATTTATN CTCCCAGTGC TAACCTTGATA TCINCTTGTG TGTACACGTG TGTNTGTGTG  
CAAATATATT TCTAGGAACA AGAGCAAACA TTCTAGTAAC TATCATTCTC TGATGTGGAG AACITGGGCA GAGATCTGAG  
TTACAGCTTT GTGGATTAT TCTCTCTGAT GAGAGATCGC CCCTTAGAAT GTCATGGTCC TAACCCCGTC ATGGATACCA  
GGGGTGAATG GCAGGGTTCT TCTCTGCCC AGGAGGAAGG GTATGGGGAG CCGGTGCATC TTGACTGTCA GGTACCTGT  
CTTACCACCT TTACAGCTAG GCTTCTGAG GTGCCAGCGT CTCTGGGAA TTCAACTGT AGTTTAGAGG CAAGCTGGGT  
GA

SEQ ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTTC CAGAGATCAG ACCTCTTTAG ACATCTGAGA NTTACATACAG GAGAAAAACC TTATGANTGC AGTGAATGTG  
GAAAAGGCTT CTCCCAGAAC TCAGACCTCA GTATACATCA GAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA  
TGTGGGAAGG CTTTACACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGGA GAGAAACCTT ATGTATGCNC  
TGACTGTGGG AAGGCCTTCA TCCAGAAATC ACATTTCAC ACACATCAGA GNTTTCATAC TGGAGAAAAG CCGTATGANT  
GCAGTGACTG TGGGGAATC CTTTCACTAN GGNAGTCACA ANCTTCCATG TGCATCAAAG GNTTNACANC CGGGGAGG

SEQ ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTTGTGTT AGTCTGTAAA ATCATTTCCA GGTAAATCT AGAGCTTAAT CCATATGNG TGCCATCTTT TGCTTTTCCA  
CACCTCTNAT CCTAGGTAAG TNAGAGCTAA GAGTATTIN CTGAGCTTCT ATTATGGGCC CAGCATATGT NATAATTCTT  
TTTACACATA GGAATCTGAG GCTTAGAGAA GTTTACTGAT TTACCTAATG GCACACCATA AGTNCCTGGG CTAAGATTTA  
AACTCAGGTC TCCTGACTTA ATTACAGATGG TCAGCTCGAT GGTAATCATA ATAATATTGT NGTTGTGTGTT GTTGTGTGTA  
TNTATCAACA ATAGTAGTAG CTAAGTCCAT TTCATGAAAC AGCTCATTGG ATAGTCCCAT NTGGATAATT CTGA

SEQ ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTCTGCC TCTATAGATT TGACTATTCT GGACCTTTCA CATAAACGGA ATCATGTAAT ATATATAATA AGCAAAAGGT  
AACAAACAACC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAAATGTG CTGTATCCAT ACAGTGGAAA TATGTGTGCC  
TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATTGT TTCATCTCCC CAGGAGATTG  
CAAGGTGCAG CCAAGGTTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAGGGGCAG  
GAGGGATGTC TCATTGAAGA TGACTGTTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC  
CCAATCTTCA ACACAGCGTG GA

SEQ ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGTNAG ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC  
AAGGGCAAGA GAAAAATTCC TCCAATTITA TTGAACGAAG ACCTCCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTC  
TCCACTTCCA GTTTTTCAG AAGTAAGTA AATGCAGGAA TGGGTAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT  
TCAGATIGCT AATGTTACAA CTTTAGAAAC AGGTGTAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG  
ATATGAACCT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GGAATGCAGT  
CCAAGTAA

SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TGCTCTGTT GCCCAGGCTG GAGTGCAGTG GCACGATCTC AGCTCACTGC AACCTCTGCC TCCTGGGTTT TAGCGATTTG  
CCTGCCCTCAN TCTCTCAAGT AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGTAGAGGC  
GGGGTTTTGC CATCTGCCT AAGCTGGTCT CGAACTCCTG GCATCAAGTG ATCCATCCAC CTTGGTCTTC CAAAGTGCTG

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GGATTACAGA CGTGAGCTAC TTCACCTGGC CTGTGTGGCT CTTTTTCAAA AAAAGTTAC TNGACTCTTG CTTTATTGCA  
AGTCCCAGAA TGGATTTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCTTG  
TGACAAGCCA AATACITGTT TTTTGTGTG TGTTGTGTTT CCTTCACCTT TTCATTGTAT GCCCTTCAGA AAAATCTGAG  
AAGTGGGCTT CCATTTTGA AAAACAGGAC TTCCTTAGTA CCATAGATAC GTAGATTGCA ATTTNCTTTT TCCTGCAGCA  
TTACTGACCT TGTGAAATGA TGCCTATGGA TACGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

TTTTGINTT GTGTGTAGAG ACTGGGTTT NCCATGNNCC CAGGCTGGTC TTGAACCTCT CGGCTTAAGC NATCCTCCTG  
CCTTGACTTC ACAAAGTGCT TGANTTACAG GTGTGAGCTA CCACGCCCTG CCATGTTTTC TTGTGTGAAG GATCTGTGTA  
GTTTTATATC TTTCTGTGGC TCATATCTAA TTTAGTTGAC AGTACCTGTG GGTCACTAGG TAGACATTGC TAGCAGACGT  
TTAGAAATGA AATACTAGAG CTGGGAAAA AGTTGATATT TGAGATAGAG ACTTGAAGAA CATTAGCAGA GAGTTGGTAG  
TTAAGGTCTG TGAGCTGGTG AGCAATTCAA AATAAAGCA GAAGAGAAGA GGAAGACAAG GGTCAAC

SEQ ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAAATA ATCAGTGAGC CACGGGCTGA ACTGTGTGAA AAGAAATGGA GGGCAAGGTC  
ACAAACCAGT CCTAAGCTG TCTAATTTA ATGTAATCCT CACTGTTTGT CATTATTGCT TTTNATGGCC ATGAAATCTG  
TTTTTCCCCA GINCTCTAGT GTAATTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTTCC TAGAAGAGTC GGGGACATTT  
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTCATGCCT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT  
CTGTTTCAGAA GTAGTAACIA TGGAGTTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAAGGAA AAGCAAAGA TTGAAGAATA AAAACATTTT GTATTTGCCA AACTTGTNC TGTAGCAGTA AGTGTGAAAC  
AAGTTTGCTA CATTTCCTT TTGGTTTTA CTGGTTGGG GCITTTTTGT TTGGTTGGTT TTAAAGGATT TAGGGGATTG  
GCAAGTCAGT TTGTCAGATG TCAATGAACA GAAAACCTAA GAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT  
TINCCTAAG TAATTTCTA ATCATTAGIT ACAGCTCTGT GTCAAAGAT GTACATAGAA ATTTATGCTA GATCTTTAAC  
ATCTTTCTT ACTGTGTGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GTTCTTTGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCTCTGGG ACACATTCAA AGCAGTGTGT AGAGGGAAAT  
TTATAGCACT AAATGCCAC AAGAGAAAGC AGGAAAGATC TAAAATTGAC ACCCTAACAT CGCAATTAAA AGANCTAGAG  
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAACTGAAGG AGATAGAGAC  
ACAAAAAACC CTTCAAAAA TCANTGATTC CAGGAGCTGG TTTTGTAAAA GTTCAACAA ACTGATAGNC CACTAGCAAG  
ACTAAT

SEQ ID NO:843: (Length of Sequence = 380 Nucleotides)

GGCCTTCAAA TTACAAAAAG CAATTTACAT TATAGTAATA GTTCATGTTT ATAGTACAGG AACAAGAATG AGTTAACTA  
AATATTCCAA ATCAGTACAA GTNATNCCT TTTTTTTTTT TTGAGACAGG GTCTCACTCT GTACCCAGG CTGTCTGTCT  
TTGTCAATCA GGCTGCAGTG CAGTGGAGTG GTCACAACTC ACTGCAACTT CAGCCTCCTG GGCTCAAGCA AGCCTCCCAC

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CTCAGTAGCC TCCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTGCG CATGCCCAGC CTAGTGGTAT TTTTAACAGA  
TAANTAAGAA TGGAGGTAGT GGCAGAGGTG GAGTGAGANG AGAGACANGT AAAATATAGG

SEQ ID NO:844: (Length of Sequence = 257 Nucleotides)

TTTCCCTCTC GTTGCCCAGG CTGGAGTGCA ATGGCGTINAT CTTAGCTCAC CACAACCTCT GCCTCCCAGG TTCAAGCAAT  
TCTCCTGCCT CACCTCCCG AGTAGCTGGG ATTACAGGCA TGTNCCACCA CGCTGGCTA ATTTTNTATT TAAGTAGAGA  
TGGGGTTTCT CCATGTTGGT CAGTCTGGTC TCAAACCTCT GACCTCAGGT GATCTGGCCA CCTCGGCCTC CCAAAGTGCT  
GGGATTACAG GTGTGAG

SEQ ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CTGCAATTAC CTGGCAGTAA GCTTGGAGAG TAAGTTTTC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC  
TTTGACAGATC ACCGCAAGTA TTGTATTTT ACTCTAAAT AAACAGAAAA CCCAGGAAGG GTTTTAGGCA GATAAATGGC  
ATTATTTAGT TTCTGTATTT AAGTCATCAT TTAGGTTACT GGGGGAGGCT GCCTGAAGT GGATCAGAAG TAAAAGGCAG  
AGATACCAGC TAGGAAGCTG TTGCAGTGAG CCAGGTGAGA AGAGAGGGCC ACCTGGACCA GGTAGAAGCA GTACAGGTGA  
AAAAANTCAG ACACCTCCAA ATCTTCTCA AGATTINATA CATTTATTTG CTGGGCACGG TGGGCTCACA CCCGTAAATC  
CCAGCACTTT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGGTGA CAGAGTGACC CTGTCTCAA AAAACAGTGA TTGTTTGTA GGAAATTATT AAAACCTTGG TTCAATATCC  
AATATCTTAA CTTTAAATTT TCAAATACTT CAAACTAGT AAGTATTACT ATGTCTAAG CACAGTGCAG TCCAACGGAN  
TATGTGAGCC ACATATATAA TTTTAACTAG GCCAGTAGTC ACATTAATAA GAAAA

SEQ ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCTTCAT CGCAAACAG CTTTCAGAGA TAGATGCTTT GTTCCAATC GAGCATGCTA TTCCAGTGTA  
CTGNACATAC TGTACCTC GTGTAGGCA CCTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTTAAGCATT  
TTTAATAGCT TCATGTACAG CATGCTGCTT GGTGNACAA CATTAATTCT NCGATATTTG TGTAGCTTGA NTGTAACCGN  
TTTAAGAAAG GTTCTCAAAT GGTITG

SEQ ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCCTCGGTC CCTTTTAAA AATTACTTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTA TTCCAGCACT TTGGGAGGCT  
GAGGTTGGAG GNTACCTGA GGNCGGAGA TTGAGATCAG CCTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAAATAC  
AAAAATTAGC CGGGCGTNGT GGCACATGNC TGTAAATCCAG CTACTCGGGT GGCTGAAACA GAAACCAACA ACGNCTGACC  
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEQ ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAATTTTNC TAGTGAGGAG TGGAGGAAGG GGGCCTGGTG GAGGAGTAGC AGCCTTINCA AAGGCCCTGA GGCAGGAATA  
CCTGGGAAGT GGGGGCGTGC TTGINTAAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGAAGGCCAC  
TGAGTGTAA AATTAAAAGC AGTNGGGGCT GGGCACAGTG GCTTACACCT ATAATCCCAG TACTTTGGGA GGCCAAGGTG  
GNTGNTCAC CTGAGGTCAA NGAGTTINAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEQ ID NO:850: (Length of Sequence = 320 Nucleotides)

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ATGTCGCGCA ACTCAGGAGC AGGGCAGGAA TCAAACCTTTT TGGAGTTGCT ATCAAGTNCCT TGATTTTNC AATCCCAACCG  
 TCCGCAGAAC ACTAGATGTG TGNATGINTG CTTGTGTGTG CATTTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG  
 NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTAACTT  
 GGTTCCTTAA AACCTTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEQ ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTNNNTTTA ATAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNTAA  
 CCCCAGTAA AATATATACT AAAATACAAG NAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA  
 ACAGTTGTTA

SEQ ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGTACAC ANGIGTATTT ATTACATTTT GCAAGCACTC TGTCTACAT TTCAAAAACG CCACNTCAA GCTGTTGGCA  
 CATTTATGTA CAAAACAGAT TAATTGTAAT GCCTGTACA AAGCACTCTG TGAAAATACA AACTCTAATA CCAGAAATAA  
 AAGCCAAAAG TGTCACATC ATTACATAAG TNGAAAAGTC AGTTTNGAA ATTATCACA ACTGTTATGN CACGGAAGTG  
 AAATACTATA ATATAG

SEQ ID NO:853: (Length of Sequence = 281 Nucleotides)

GTATGINTT TCTCTTCTT TGTGCTTCT AGGATATTIN ATCCTTGACT TTAGGGAGTT TGATTATNAA ATGCCTTGAG  
 GIGATATTT TNGGGTAAA TCGCTTGEN GTTCTCTAAC ATTCTTATAC TTAGATATTG ATATCTCCTT CTAGGTTTGG  
 GAAGATCTCC GTTGTATTC TTTTGAATAA GCTTCTTACC CCATCTCTTT CTTTATCTCC TCTTTACGC AAATAAAGTT  
 TTAGANTTGC CATTTTNAGG CTATTTTCTA GACCTGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACCAN GTAATGGAGG TCTATGCCTG ATGAAGAACA CCTGTAAAAG CTGGAAAATG  
 TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCAGAAG  
 AAATANATA AGNTCCAACA ATGAACACAA NATATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT  
 TTAATGAATG ATTAG

SEQ ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCA CCAGAGTGAG CATGCTTNCCT TCTNAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA  
 GGACAGAGGC TTCCGTTGTG TCTCTCIAAT TCATTGTTT TTA AAAAGGA TTTGGGCTTA CAAGTTTCAA ATACTAAGAT  
 TINATAAAGT CACATGGATT TTA AAAAATC ACTCTATTGT ATGTTTGAAA CATTCATAA TTTAAATAAA AGGATTGGTA  
 TTATATATGT NCTTGAGTTG CTATAATGTT TTAGGTTT CTTTGTCTC ACTTTTGAAT TTNCGAGGA TCTCCTGGGG  
 GAAGNTTCAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTTNAGACAA AGTCTTGCTC TGTCACCCAG GCTGGAGTGC AGTGGCGCAA TCTCGACTCA CTGCAACCTC CACCTNCTGG  
 GTTCAAGCNA TTCTCCTGCC TCANCCACCC AAGTAGCTGG GACTACAGGC ACGTGGCACC ATGCTGACT AATTTTTTGT  
 ATTTTTTTTA GTAAAGACGG GGTTCACCG TGTTAGCCAG GATGGTCTCG ATCTCCTGAC CTCATGATCT

SEQ ID NO:857: (Length of Sequence = 334 Nucleotides)

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AAAAACAATT AGTAAAAATT ATGCATTAAG GAATTATTTA CTAGACTTTC TGAAGTAAA AAATAAGTCA GCTGGTTTTTC  
 CCTTTGANTT CCTATATATT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTGAAATGA  
 TTTATATACT GCATTGACCT GGCAITGTAA TATTINCTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT  
 TTAAACCCAT TCTTTCITGG AGAATAATTA TAATACCTTA AATACAGAAC TTGGGGTTC TGATCTTGCC ATAGCCATGT  
 AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTG ATGGGTGCAG CAAACCACCA TGGCACGIGT ATACCTATGT AACAAACCTG  
 CACGCTCTGC ACATGTATCC CAGAACTTAA AGCATAATAA TAAAAAANTA AGAAATGGA AATTGATTTT AAAAATTTTT  
 ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGGT  
 TTAATATCCA GAAAAATATA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCCTCACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCCTT TACATTTCCC TTATAAAT CACTTCCCTG  
 CCAAGATCTC TGTCAAGGTT TGAGAAGTCA GAGCATTAAG TTATTINCAA TAAATGGTAT GTACATGANC ATCAGCAAGC  
 TCCAAGAAAT GACTCGAGGG CCTTTNACTA CTCAGAGAAT AAAGCAAAAA TGCCAGGTTT TCAGTGCTTG TCCTTTGTGC  
 CAGGGATTTG GACGTGTTTT TTGTTAAGTN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTTCCAGA AATTAATTGT  
 AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACGNIATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTTACATTG ATGTCATCAN TATTACAAAA  
 AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GAOCACGCG ACACCTAAAG TAGACCATGC TTCCTTCCCT  
 CCACTGCCAG GTTATCGTCC CGGGAAGCCC CCCACCCCT CGCT TCCTC CTCCGCTTTC CCTAAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GGGCAGGTGT CAGCGCCCGT TTCACCGCCA CGTCGCGGAC ATGGTGATTT CAGAAAGTAT GGATATACTC TTCAGAATAA  
 GAGGAGGCCT TGATTTGGCT TTTCAGCTAG CTACTCCTAA TGAAATTTIN CTCAAGAAGG CACTGAAACA TGNTTGAGT  
 GACCTGTCAA CTAAGCTGTC TTCAAACGCC CTGTGTGTC GAATTTNCCA CAGTTCAGTG TATATATGGC CTAGCAGTGA  
 CATAAACACC ATTCTGGAG AACTGACTGA TGCTTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATTT GAGCCAGAAG  
 AAGATAT

SEQ ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTGTGT CCTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCAGTCT CTGCGGGGAA AGGACGGCAT  
 TGGGGCCCAG GGTGGAAGG GGGTCCTGGG CTTCANCTGA AGGGCAAACCT GCCCAGTGTA GGAGTCCGTC CAGGACAGGC  
 AGGCAAATNC TCTCGGGTA TGGAGATAGG TCCAAC TGCC CCGAGATGTT GCGAGTGTA ACCAAGGTGT TTCCCGGAG  
 CATCTCCAAG CAGTCCCACC ACCACTCCAC TTTTGTGAG CTCACCCCTT GGGTCCGTGT CTNCTCCTT TTCATAAGTT  
 AGTGGTGCTT GCTTCCGGT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GGTTTTATTT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTTTAAA  
 TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAG GAAAGACATT TTNCATACC AACCTTCCC TAGTTCGACG  
 TTTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTTAGGACG AAGTAACACA ACTTTTATAA



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TTAACCACTG AAGTNGTCTT TAAGGACAAA ACTTAAATTT TAAAATGGGT GTTACCATAT TTATGAGTG GACTGACTCC  
AAGGTTGCCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCA GAGG

SEQ ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGTINT CTGAGATTG TCATCCGCTG AGGGTAGAGC TGAGGGTGGA AGGGGAGTNA  
GCAGACACTC GGAAGGTGTC TTNAGGCTCA GGGAGTTATC AATTATAGAA TGTGTGTGAG TTGGAGGAGG TGGCTGGTGG  
CCCATCCTGT TTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCCGGGA GGCAGAGGTT GCAGTGAGCA GAGATCACAC CACTGCCTC CAGCCTGGGC AACANAGCAA GACTCCGTCT  
CANAAATTTN CCAAATCTG ACGGAAAGAA AAGAAACAAA TGGTTCAGAT GGGACGGAGG GTGGGGGAGG GGGGGAGGGT  
GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TTAAAAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCCC CAGGCCACTG AGCCCGGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC  
AGACTTCAAG CAGTTTACAA ACGAACTCA CTGTTAAAAG CTGTTAAATC TCATTAAAC AGTAGACGAG TGCTTTAGAT  
TCCTGAATA TCAAATAATA TATACAGATA GACACTGAGA CATGACAGTC TAATCTAAAG CATCTTTACA GATGCATTN  
CTTGAAAAGT TAGTCTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA  
NTAGAGTG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GTTCATGGC ATGTAATAAT TATGTAAAT TCAAATTTTA GTGTCCCGAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC  
ATGINTTGCC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCA CGGCCACGGG GCCTAAAATA  
TTCTCTATCA GACCCCTAGA GAAAAATATG CCGACCTGG ATGTGACTGA GGGTGGGAC TTGGGTGAAT GCCGGCCAGG  
AGTGACATCA AGGGTTTGAA GCAGACCTC TGTCCAGGAG GGAGCGGAGG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC  
TGTGGTGACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCTCTTGGN TCCTTGCTCT GGGAAGAAG ACTCAAGCAG CTTTAGAAAA AGTCCACGTG  
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCATCTTAA GAGTGGNTCC TCCAGCCCCA GTAAAGTGT  
CAAATGACAG CAGCCCTGGC TAACATATG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAATCAG CTAACCTGCT  
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTGTGTTTAA GCTGCTAAGN TCTGGAATAA TTTGTATTTC  
AGCAGTAGNA TACTAATAC AANGCCACCC AAGNATCAAT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCCTC CTGTGAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT  
GAACCCCTGT CATGCGAGGG ATGTGGGTG CACTCTCTT ATGAGAATCT AATGCCTGAT GATCTGAGGT GGAACAGTTT  
CATCTGAAG CCATCCCTGT GCCCTTACCT GTGGAAAAAT TGTATTCCAT GAAACAGTT TTTGGGGCCA AAAAGATTGA  
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGGTA TAAAGTCTTT ATCTTACTTA TATTATATC CTCTATGGT  
TCCACACACA AGGTGCTTTT TACTTAAAG TTGTAAACT AAAATATTNC TTTAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

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CAGCTTTGCA AATCAAATAG AATTCATTTT GCCTCCNCTN ATCTTACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC  
 TTCAAGAGAA GAGGCGTTCC TGAGAGCCTC CTGGGTGAGC TTGCACACCT GGGGGCCAGA TGINCTTTGC CCTCCTTGCA  
 AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTGCTTTTIN AGTTTAGATG AGAAAAACA  
 GCAAAATAGT CCATCAAGGA CAAATTCTTG CCAATGGATT TNCITTTGCA AGGANGITCA CCTTTGNCC TCAAGCATCA  
 TCTTTAAGTT GTGAATGCCT GATGGGAGGT CCAGGTTGNN CTGTGGGAGG AGCTNGGGT GGNITCCAAA ACCACCTGGG  
 GACCACTGG

SEQ ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTTGCATT GATAGATTAG TTATTTATGC CAGTNGTCTC TGCTGGCTT GTTTTGGTTT TNATTGCATT TGTTCCTAG  
 AGATTGTTTT TAGTTTINCA ATTTCTTTCT CTGTACACCT GCCCTCCCC CACCCACCA CTGGGTACT ACCTCCTTTT  
 TGGCACTACA TGATGCCTTA AGCCCAGNT TGCCTAAGCT TTCATAACAG ATCCAGCAC TGCTCATCCC CAGTGGTGA  
 GGTNCTAAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTCC CTTAAGGAAA GCCCTTCTG  
 CAGATTCCCA CAGAACTCGG CCCAGGCACT TAACCTCCAT CTCAGCTCTG GTACAGCTCA CTGCGTACAG TGTGTACCAA  
 ACTCTTATGC CTGNCCTGCT GATAAAITCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG  
 TGCTTGTAAT TGTGTAAAA TATAGANGTA ACATACAGCA TGTGTCTACA CGNTTAATAA ACTGGTGTCTA ATT

SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAAT NATCAAACT ATCGTACAGA  
 AAAATTACAA ATTCGTTGCA AAATACATTA TACTGCTACC ATTAAGAAAA AAGTGCTTTT NGTTTTCTTT TCTTTCTTTT  
 TTTTTTTTTT TTTTGCCAGA AAAGTATCT TNCATATAG AAAATCCTAC ATGTACCTT GCATGTGGCT AGGNTATATC  
 ATAACGGAGT TTGTACTGAG TCCTTCTGAT TTGCTGGATG AAGGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TGCTGAGAGA TTGTAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA  
 TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAACTGTT  
 TTGTGATAAG TGAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAGAN GAAGGACTTG CTTGANTGAC  
 TTGGTGGTGC ACCAGAAAAT AACTTTTACA AGAATGCTTT CTGTAAGCT GCTGCATGT TCTGGAGGA AATGTTATTT  
 CTAATGCATG TTATTTCTTC AAAAGATAGG ATAACAAAGA ATTG

SEQ ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TGCAGATTAG TATCACTTTG CTCATAAAAG AGAGTATAAA GGTCTTGAA GTTTTIGAAA GGAGCGGCTN  
 AGCTGACTGT TAAGGAAGCT ATCTTTTGTG TACAAGAAAT TTATCTTTT CCTTCTAAA TTTCACAAAC AGAATATTAT  
 TAGAGACAAC AGAATACATT TACAAAAATG GCATCAGAAA TAATTGANTA CATGTGTAC AATATCTNCT ATTAATGAAA  
 TAAATGTATA TTTNATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TINCCAATAT TCTAAGGNTG ANCAAAGNNG  
 GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTCANCTT GTGGGTCAAC TTCTAATATT TGATGGTGGC TACACTGTGA CAAGAAAGGT TTTNAGCTT GTTGGGTCA  
 GTGGATGGGC ACAAGGCAC CCAGTGGTGG TCCCCGNC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC  
 AAATATAGT AGAATGTGTA TCTAAATAGT GACTGCTTTG CCATTTTATT CAAACCTGAC AAGTCTATCT CTAAGAGCCG

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CCAGATTTC ATGTGTGCAG TATTATAAGT TATCATGGAA CTATATGGTG GACGCAGACC TTGAGAACAA CCTAAATTAT  
GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTTGGCTCC TGAATGTGC AGAAACTGG TTTGTACAC TGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCCTCA  
GTCAGCTCCG TTCTTGGTGT CGCTTCTTG CAATTTTTT CCTCCCCTGG CCCTTCCTGT GAGGGTTAAA AGGGCCATCT  
CCAAGCCAGG TGGAGCCCC ATCCCATTGA CCAAGAGGGC AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCTTCTAA  
AGGAGCCCAA AGGGGACACC TGCAGAGGGC GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT  
CCAATTTCAG TTGAACCAG ATGTGGTATA CACTACAAA TGCAGATTCT GGTGCCCCC TCCAAGAGTC GGCTCAGTT  
AAAA

SEQ ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACGCTG TGCTGTGGC ACGAACCTC TCAGGGACTG GAGCTGCTT TATCCTTGA AGAGTATTC CAGTTGAAGC  
TGAAAAGTAC AGCAGAGTGC AGCTTTGGTT CATATTCAGT CATCTCAGGA GAACTTCAGA AGAGCTTGAG TAGGCCAAAT  
NITGAAGTTA AGTTTTCCAA TAATGTGACT TCTTAAAAGT TTTATTAAAG GGGAGGGGCA AATATTGGCA ATTAGTTGGC  
AGTGGCCTGT TACGTTGGG ATTGGTGGG TGGGTTAGG TAATGTGTTA GTTTATGNTT NGCAGATAAA CTCATGCCAG  
AGAACTTTAA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG  
CTTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAGCCAG TATTCTGTCA CAGGGACATT TGTCTTTNTC  
CTTTAATGCC CAGTAAGGGT CTTCTCAGGT TCCATTAAAC ATGCAGAATC ACAAGACCCC CCCAAGTTA CCATGGTGCC  
AACCGACTCA AAACAATACA GACAAGAAGC TCAGCTCATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA  
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGGTCC ATATCCACGG GG

SEQ ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTC TGAGAGGCC CAGGAGTTTA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAAGTG  
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTIN CTGAATTTCA GAGCTTAAAT ATTATACTTC  
AACATGAGTC ACACCTTAT TTATATGTTG GTTGTCTCA GCTGTGTGT GGGTTGGTGG AAGGAGACCA CACATACATA  
CACACAGAGT ACATACATGC TGTGTATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA  
ACAAGACTA GAGAGGCCTT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG  
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTTNCAG TCAAAAGTCC TTGAAGCTGG GACCTTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTPTTG  
ACCGTTTCAA AAAAGGAAGA AAAAACCCT TAAATCATTT TTCTTTCTC TTTTCTACTG CAAAGGCCGA CGAGATTGAA  
ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGGCAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGGAACAGCT  
CTCATGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG  
ACCCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

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TGCCATTAGC AACACTGTTC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT  
 CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT AACTATATACC  
 AACTTTTACC CAATTGGGAA TGAAAAATTA CATTTCCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTTCTTTTG  
 TGGGAAAGAA CCAGAAATTC TTTGTCATAT GTACCCATTT ATCTTATTIN AGTTACCCAA CCAAAAGATA AAATAATATT  
 CTCAAAGAGA TAATTGACTG GAGGAGTTTA AAGTGTATTAT AAATATTAG

SEQ ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGCAGT CCAGACGAG CCCTTTGTCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT  
 GTGATCAGAA GGCATGTCT GIGGGATTTT NCCTTCCCT TTCTTGATCT CTCTGTGGT TCTAGGTTGT TTGGTGTTC  
 ATTGTTATGG TGGCTTTTNA TTTTAAAGCC CCTTGAGCCC CATGATGGCT GGTGTCAACC TGTTCCTTTA CACTGTGTGG  
 CCAGGTGCTG CTGTCTCTTC TTAGGGCATC ATCAATTGCA AATATTTCTT TTTGCTCCCT TTATGAAGAT GTTCTTATAC  
 CCTTGCTTTT CCATATTTTT TTGGGGCCAA GCAATGCCAT CINCTTTTA

SEQ ID NO:884: (Length of Sequence = 327 Nucleotides)

AGTTCATCTT TTTCCAGAGG GGTCTGGGTG CCTTTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG  
 CTGAAGCTGG ATTCAGAACT CTGAGGCACC GGGATGGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG  
 ATACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAAGGCTG TGGGGGCACA GGGGCATAGC  
 CAGGAGGAGG CTGACAGGT GGGGGCCGA GAGTGCCCTG GGAGGGAAAC AAATTCTTGA GCACAGCTTC AAATGGCAAA  
 GTGGGCT

SEQ ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAGCCTT ATCCACCATG ATCAAGTGGG CTTCATCCCT GGGATGCAAG GCTGGTTCAA TATATGCAAA TCAATAAATG  
 TAATCCAGCA TATAACAGA ACCAAGACA AAAACCACAT GATTATCTCA CTAGATGCAG AAAAGGCCCTT TGACAAAATT  
 CAACAACCTT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAAA ATAATAAGAN CTATCTATGA  
 CAAACCCACA GCCAATATCA TACTGAATGG GCAAAACTG GAAGCATTC CTTTGAAAAC TGGCACAAGG ACAGGGATGC  
 CCTCTCTCAC CACTCTATT CAACATAGGT GTTTGGGAAG TTCTGGGCCA GGGGCAATTT

SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTAATCCAGA AGTCCCTTCT GGGTGAAAG GAATGAGTGT TTCANACTTA  
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT  
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACTTGA GCCTTGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
 ACTCTGAGT AGCAAAAGCA TTAGAACATC ACAGAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA  
 GATGCCATGG GAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGNAGGC TTGCCCACAC TGATTCATT TCGGAGATGT

SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAAATAAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAAGTGG ATAATAAGTA AAGGCTGAAA GAGTACTGAT  
 ATACATGCTA AATAAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTAGACAG GACATAGAGA  
 CCTGGAGAAG AAGCTCCCAT TTTTATAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG  
 TCAATGTAAT GAAGCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGG AGAAAAGGTA ATCTTGTTA TAAAGTGGCA  
 AAGGAAGTTG GCCTGAATTG TATTCATGTA CTAGTGCTTT CCT

SEQ ID NO:888: (Length of Sequence = 318 Nucleotides)

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ATCTTGCAATG ATTAATACTA TTGGCCTGTN CCCTTTATCC TCAGCTGGTT GTACAATTCT TGAATGCTTT CTTCCTCCCC  
 TGAGGATGCT ATAGATATTG TCCTACTGTN ATCTGAAATN AGTCGTTTTG GAGAAGTTTC TCCATCCAGA TACCTATAGA  
 GTCGTCTTT TTTTTTTTTT TTTTTTTTTT ATATGCAAAC NCTCGCTGTA TTATTCAGGC TGATCTGAAT CTCCTGGNCT  
 TTAGTGTTGT GACAGCTTTG GCCTCTTAA ACTGCAGGNT TACAGGCATG AGCCACAGTG CCTGGCCATC AAGTAGCA

SEQ ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCT ACGTAGACTT CINCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGCGAC CACAGCAAGG  
 AACTGTAACG GCCAACAGTC CTCAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA  
 ATTAAATGA CCATGGCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAACC ACCTTGGCTG GAAAAAATGT TTGGTAGTTT  
 AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC  
 TAAGGTTTAT AACCAGCATA TTTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GTNGTAGGGG TTCGTAGGTA GGGCTAGTAG GTAGGGTTAG TAGGTAGGSC TAGTAGGTAG GGCTAGTAGG TAGGGTTCGT  
 AGGTAGGGTT CGTAGGTAGG GTTAGTAGGT AGGGTTCGTA GGTAGGGTTA GTAGGTAGGG TTCGTAGGTA GGGCTAGTAG  
 GTAGGGCTAG TAGGTAGGSC TAGTAGGTAG GGTAGTAGT TAGNGCTAGT AGGTAGGGCT AGTAGGTAGG GCTAGTAGGT  
 AGGGTTCGTA GGTAGNGTTC GTAGGTAGGG TTAGTAGGCG GTCTNTCCTT CTCCACCCT GGNVNCITGT AAAACNTTAT  
 TTTACAAGCA ATAGGAATTT G

SEQ ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA CCGCNTGGAG CAGATCGCCG CCATTGCCA GGAGCTCAAC GAGCTGGATT ACTACGACTC  
 CCACAATGTC AACACCCGGT GCCAGAAGAT CTGTGACCAG TGGGACGCC TCGGCTCTCT GACACATAGT CGCAGGGAAG  
 CCCTGGAGAA AACAGAGAAG CAGCTGGAGG CCATCGACCA GCTGCACCTG GAATACGCCA AGCGCGCGGC CCCCTTCAAC  
 AACTGGATGG AGAGCGCCAT NGAGGACCTC CAGGACATGT TCATCGTCCA TACCATCGAG GAGATTGAGG GCCTGATTCT  
 CAGCCCATGA CCAGTTCAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGIGGTAGT GCCTGCCTGT AATCCCAGCT  
 ACTCGGGAGG CTGAGGCAGG AGAATTGCIT GAACCTAGGA GGTGAGGTGG AGGTTGCAGT GAGCCAAGAT AAAAAGAGTG  
 AGACTCCGTC AAAAAAAAAA AAAAAAATA TATATATATA TATATATATA TATATTINGN CTCGAATCCC ATCTAGGTTG  
 CTGCAAATGC CATATTTCAT TTCTTCTTCA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTTGT  
 TGATIGATGG GCGTTTGGGC TGGTTCACA TTGTTGCCAG TTGCAAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TATCCAAGT TAGTATTTT ATGCAGTAGT TTCCCCCTCG AGACTTGTA TAACCACATC TTTTAAATCT  
 GTAAATAATG TTATCAAAAT AATCTTAATC TTTGAAATCT CACAAAAATT TATATTTTAC AATCCACCCT GAATATCAAG  
 GCTGCAAGAN TAACACAACA TTCTCTATAT CCAATATTT TACAGCTGTA CCCAAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTTTGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AACTAATAT CAATGTTTAA CAGGGTTGAC  
 TGTCAATTAAT GATGTGCCA GCTGTGGGTA CAGATGCTTT GCACATTACT ACCCTCTATT CTCACAATCT TCCATGGGGG

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ATGTATTAGA ATCCCTTTT ATAAAGGATA AAGGTGAGGG TCAGAGAGAC TAGGAAGCCT GTNCAGGGTG ACACAATACA  
AAGTGTGATA AATGGGTTT GTACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEQ ID NO:895: (Length of Sequence = 304 Nucleotides)

GGTCTAGATT CAGTTATGAA TGTAGGCATT AGTTAAAATT AACAAAGATGC AGAGTATTAA TTCTTAAGA CAACAAGTG  
ATTTCTGTAA GTTTGAGCCC TATGTGGAAA GCATTGTGGA ATCTTAACCT TTTTGTACAC ACTCTTGTGG GACGTATCAT  
ATAAATGTCA GCACTAAGTA ATGCTTGTGTT TGTGGCTGAA TATTTTNCGT AGATGTTTTT GAAGTTGACA TGAATTACGT  
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTNGGA ATATGGGTTG TGGG

SEQ ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAAGTATT TCATCATATG CATGTACTGT ACCTTATTTA GCCACCCCA TTTTGTGTTGG CTGTGGGAGA ATTACAATAG  
CTGTTTTGAC TGTGTATCA CATGCCAGGC ACTGTACTGT GTATTATCTC ATGTAATTCT CATAGTTACT GCATGGTGTA  
GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AAAGTGAACC CAGAGATGTT AAATAATTTG CCCAAGTTTT TTGGCTGATT  
ATACTGATGA AGATACTGAT ACTAGCATTG TGTGTTCAGT TATTTGCCAG ACAGAATTCT TTATTTTNTA ATACATATA  
TCCATTTACT CTGAGG

SEQ ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACCTNA GGTCAGGAGT TCNAAACCAG CCTGGCCAAC ATGGCAAAC CCCGTNTCTA CTAAAAATAC AAAANTNAGC  
CAGGTGTGGT GGTATGTGCC TGTAAATCCA GCTACTCAGG AGGCTGAGGC AGGAGANTCA CTGAACAGG GAGGTGGAGG  
TGCAGTGAG CCGAGGTTGC AGTGAGCCGA GATTGCACCA CTGCACTCCA GCCTGGGCGA CTNAGCGAGA CCCTGCCTCA  
AATAAGAAA TAAATAANTA AAGTGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCCTGG

SEQ ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGGTAT GGATGATGGG GGGAAAGGGCG GTCCGCTCTG CCACTGTCAG GGACCAGCCG GCCAACGCCC  
ACCCGNAAAG GTGTCTAAAA ANTNAGCTT TTCACCCACC TGCCCTTTTC TTTCAATCCC ACGCTGTTTC CTTTCAAAGT  
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEQ ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAAT TAGCGTTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCNTIN AACATNAGTG  
TGTGGTGCCT CCCAGGAGCA GGGATTNAG CNAGGCTGCT GACACATAAA CACACCCCA CCTCCAGAAG CAGAGGAGAG  
GAGCCAGGG CCAGGGCAGG TAGCTCAGCA AGGACCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA  
GGTTCAGAGA GGAGAGAGGC AAGA

SEQ ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACCAAG TCAGCAGAAG AAATTAGAGG AGAGACCAGT TAATAAATGT AGTGATCAAA TAAAGCTAAA  
AAATACCACT GACAAAAAGA ATAATGAAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG  
GAAAAGATAA TAAACCCNAA ATATATTIGA NAGGTGAATG CTTGAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGTAAT  
GTTGAACCA AGGTTAATAA TATAA

SEQ ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTC AATGIGTTGG TCAAAGTGGC  
GATACAGCAA GGTTCGAGG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATTT TNGGTTCTCC TATCTTGATG

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CCAGGATGCT GTGTGTAGGC GTGGGAATNT GTGCTTGGGG CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTTGTAGAA  
GACTTCACAG TGAGAACCCTT GAATNTAAGA CTTCAGAGCA GCCACATCAG AGTACACAAC CATTGCAAAT GCACCACATC  
GAAAACCAAC TCTCCTCGTG TAGINCAGAC AGTCTCTTGT GCGTGGGGT CTNGGAAGGT G

SEQ ID NO:902: (Length of Sequence = 331 Nucleotides)

GGTGGCCAGT GATCTCCTTT CTTATCACCT ATAGACAGCT TGCCTACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT  
ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGTTNGCCCA AGGTGCGCTG GNTGCAAAC AGCTCTCCAG  
AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTGTINTCCT CTTCGTGTGA TGAACAAAGG TTGATTCCAT ATGTGGCTA  
TTGTGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGENT  
GATCTATCAA A

SEQ ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA  
AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA  
ACATTTACCA AGCAAATAGA NAACAACAAA AAATATTTCT AATAGATTTC TGCTTTTAAAT AATGAAATAT GTCAAACCTC  
TATAAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCAATGTA TGGNTAATAG TAACTGAATA GCTAGTATTG  
AATAACCAAG CTTCCTTTTG TTGTTTGTNA CATTGNGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGGTTAGAT AGATGATGGG CTAGGCAGGT GGGGAAGAC AGAGCTCACT GCCCTNIGGG GTCTCTGTGG  
GGCCAGCCCC TNATGCCCAT GTGGCCACTN ATGCCAGCT TCCCCAACA CCCCAACACA GGCCAGGTC AATATTACAA  
AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCCCAGCCAG CAGGGGTAGG GGAGNGCGT  
TGAAAGTGNC ACTCCGGTGA AAAAGGCAAC AACTTTTATA AAATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAAA GTTGAACCTT TTAAGTGCT GAACACAAAT CCAAATTCGA ATGGTTCAG CAGCGTGAA ATCGCTCTTC  
ATAAAGTGGG CTTAATCTCT TAGTTTAAAT TCTTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTTGTGGAT  
GCCATGATTG ATGATGTTCA TTTTAAAGCTC TTACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGGA  
AACTGTGAGC TGGGTTGTG CATTAAAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG  
TCTTTTCTTC CCCAGTGGTA AGGGCAAATC CTGGCTTANC TAACCAACAC CCAC

SEQ ID NO:906: (Length of Sequence = 375 Nucleotides)

CTGACTGAAA GGCTCTTTCC AGCTCCAACA CATGAAGGTT CCATAATTTT CCCAAATGT CTGCGCTCT GAAAACCTCA  
ACTATCTTAA TATTTGTGAC ATTTATGCCT GTGTATGGCA ATCTGATGGT AAAAGGAGCC ATATGTAAAT AATAACTGAA  
ACTTTGTCAA AATAATGTTA AGGAAACATA ATTAGCAAAG CAATATATAA TINCAAGTCC ACTGATTTAG AGAATCAGAA  
GTAACANITA GAATCAGAAA TAACAACIAT CTGGCAGGGA TGGAAAAATG AGAGCAGATA TAAAAGGTGT ACCCCAACCC  
CTGACCCAC TGCCCATTTG GGTGTGCACT ATGINTTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GTGCTGACTT CAGCAGCCCT CTGAAAGGCC CCTTCCATAA GCTGGGAAAG TATGATCATG GTTTCATCAT CCTTGTGGT  
TATTACTTCA AGGTTGACCA ATCTGAAAGC TCTGTGTGAA GAAGGGGACT GAGTGGCTGT GAATGATGAG ACCGTGTGTT  
AAAAGCCAGG CTTAGCCTGA GGTCCGAAG AAGCAACCTC AATGCTGTGC TTTACCATAG CACCACCTGC AGGTATCCAG

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GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC  
TCACTAGTGG GGAAAACAAT TTTACCCCCC TGTATTTAAA TATGGGGATT TCAAGGCAAA CAAAAGCATT

SEQ ID NO:908: (Length of Sequence = 207 Nucleotides)

CTTGCATACA GGTGGTAAAT TATTACATTA TTTCTNCCTC CTGTCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA  
CTTCCCAAAG GGCTTGCCCG CAGGTTNAGA GGTGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA  
GAGAGCTTCA GGGGNCTING GNTTATNACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CTGATATAAT ATCTATAAAT TTTGATTCCC TGGGGTATAA CAAGTAAATA ATTTTTAAAT GGTGCTTAGC  
AAGATTGGTT CATGNAAT GAAGCAATTA TGGCTTGANT TTATAGTAC AATATTTATT GTCTTAATTT TAATTTAAAA  
CGAATGACAT GTCTCTTTTT TTAAAAAAG TCTTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA  
TATTIATCCA CACATAAATA TTTGANAAGG AATATGGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGT CCATGGAGGG  
AGTGTTTTCA CCTCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANTN ACCACCCACC ATGACCCACC ATTTGCCATC TACCCATCCA  
TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGNAAAA  
AAGACAGACA ACCCCGACC CTCCCATCCT CAGGGAGCTC TATTCCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT  
CATCAGTGTG TGCTGCCCCG GTAAGACTGA GGTCCCAGG CCCGAGGACC AGNCTGGGCC AGGGCTTCCC AGGGGTCTNC  
T...GGGGGA CTCTCAGGAG TCCAGCTGCT GCCCTTAGC TNAGCACTG GG

SEQ ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACTTCAAA AAAAAAATA AAGAGGAGTC ATAATAAATA TTTNACTGTC TAGTCAACC AATTTATGAA GCCTGATTAT  
CTAGCTNAGC CTCCGAGAT TGCTACCGGA AATCTCCCCA GATGTTCACC CTCTAACCC AACINTCCAC TGNTGGCAG  
GAAGGCAGCC GGGCATCTGC ATTCCGGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CTTGCACGTN ACTCAACAGC  
CCTGCCTGCT AACCAGTTAA CCAGTTCTCA GTTGGGTTCA CGGACCCATG AGCGACCCAG CTTTCTTCCC CTCAGGTTGA  
TATTGTGCTC CAAGCTNGGG GATGCCCCGG GGGACTATGT GGAGGGAGAG TTCCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTNCCTATT TATAATAAAC TACAGAAGGT AGATTTCAAA GGTAATGGCT  
GTTATGGAAA CCTACTTGAG GTGTCTGCT AAAACCAACT CAGTGTGCAA AGCGAAATAC ATTTNCTACT TCAATAGCTC  
CTCATACTGC ATCTGTCTGT AGAGTTTATT TCAGTAAAC TGTTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT  
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTTTATATCC TACATATGGC TATAAAAATA AATTTATAAT TTAAAAATT  
GTTTAAATA AACATTTATT TTTTACCCTA CCAAAGTAAA GGTATACAG

SEQ ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAAGC GTGCNINTCG CTGGTCTTIN CTTTCTCTA TAAGGTGGTG CAGGINTTTT  
CCGAGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGGA CAACTTINTT ATCATCTACG AGCTGCTGGA CGAGCTCATG  
GACTTCGGCT ACCCCAGAC CACCGACAGC AAGATCCTGC AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG  
GGCCCGCGG CCACCAGCCA CCGTACCAA CGCGGTGTCC TGGNGTNCG AAGGCATCAA GTATCGGAAG AAT



SEQ ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGCGC CTGCCACCAT GCCCGGCTAA TTTTNAGTAG AGATGAGGTT TCACCATGTT GGCCAGGCTG GTCTCAAACCT  
CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCTCAAAGT GTGGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC  
CACTGTTTTT ATAGTGAAGA AAGGACACCC AAATTTTGAT CTGGTTCAGC TATTCATAT TCTATCCTGT GTGGTCTTAA  
GCAAGTTACA TAACTTGCCT ATATCTCAGT TTAATTAGCT ATAATATAAA TTAAATGGT CAAATGTTCT CTAAAGTCTT  
ACTAGTTACC AGTGTTCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEQ ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TTTTNATTAG ATGGAAGATA ACAAGCATTA CCNCATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG  
CCACAGAGGA GTGAGGACAT TACTGGCTAT GGAATGGGT ACTTATGAAA TCTAAGGGTT GGGTCTCCTG ATGAACCTTA  
ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT  
TGGCCAACAG TTCTTCCAGT TCTGGTCGAG CTTTGAATCG TCCCTTTGAA GTCTTCTTC AGNTGGTGCT CCTTCAACTT  
GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTTCAAG GTGCTGCAAG AGCTTTCAG AAGATGGGTG TTGACAAAAT CATTCTGTGA GAGAAATTAG TGAAAGGAAA  
ATTCCAAGAT AATTTTINAGT TTATTCAGTG GTTTAAGAAA TTNTTGACG CAAACTATGA TGAAAGGAT TACAACCTC  
TNCITGGCGG GCAGGGCCAG GACGTAGCG CACCTCTTAA CCCAGTTCCA CAGAGGACGT CCCCCACAGG CCAAAAAAC  
ATGCAGACCT CTGGCCGGCT GAGCAATGTG GCCCCCCTT GCATTCTCG GAAGANICTT CCATCAGCCC GAAATGGCGG  
CCATGAGACT TGATGCCCAA ATTCTTTGAA CTCAAACCA CAGCT

SEQ ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TTGAAACTA TGTATTTTT TGTA AAAACC TGATCACATA GAGAATATCA GTGGCTATAC CCTCTCTGGG  
CATCAGTTTC CTCATCTGTA AAGTGGGAT AATCACAGCC CCCACCACAG TGGGCTTCAG GGAGGAATAA ATGCATTAAC  
ACATGGCAAG TCAATTAGGA CGGTGCCTGA CAGGCTGTCA GCGCCCAAGG TTGTGACTTT TGCTTTTCTT ATGTCTACTC  
TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCTTGAATG GGATATTTTG CACAGAAGAG GTCCAGAGCC  
GAGTGTGTGT GACATGGGAG CAGAAGACCC GGGGTTTNAG CCAGGCTCTG CCACTCATA GGTGTACAAT TTTCAAAGGG

SEQ ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTGCACA TGGTAACTCT GTCATACATC TATAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAC TGCTTATATT  
CCACAGCAAC ATAATTACAA ATAAGTTTTA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCTTAC  
TTACCAATAA TTCATAGCAT ACCTCCCTT ATTTTAAAC TCATATGATA GCTGATTTC TAACTGTAGC AATCAGGATT  
CTTAGAAAGA TTCGAACTG AATTAGCTA ACTAAGGAAG CGGATTCAT TAAAAATATT GGGTTAGTTT ACAGGAATCA  
GTAGTGGAGG AACCAGGGTT GCATAAAA

SEQ ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTAATCCAGA AGTCCTTCCT GGGTGGAAG GAATGAGTGT TTCANACTTA  
GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCTCATG CTCATGCACA TCGTCTATT GATCAGCTGA ACAGAGAGCT  
GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG  
ACTCTGCACT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC  
AGAGGATNCC ATGGGAAAAT GAAAT

SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGTACT CAGGGAAGGG GCAGGAGAAC CACTTGAGCC AAGGAGTTCA AGGCTGCACT GAGCTGTGAT CACACCACTG  
CATTCAGCC AGGACAACAG AGTGACATCC TGTCTCAAAA ATAAATAANT TTTTAAATGA TGAAACTAAC TAAGGTACTG  
AGGAGGTAAG ATATTTCCCC ACGGTAAGTC ATTCAGAAAC TAAATGTGAA AAACCAAAAG AAGCCTCTGG GGTAGTATT  
CCCACTCTCC TTGCTGCCC AGGACCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAAACT CTGCTGGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT  
CTCTTTCAGA TGAAATTTTA TTTTITNCC AATAAGGCCA GCCCTACCCT GGAATCTGGA ACCANTCTG GCCCAGGGTA  
GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CCTGGTGTCC AGGATGCCT TGGNCCTTAT TATTGACCTT CTCT

SEQ ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGTT ACTGCGCTTG GCTGCGGCCA AGGGAAGACT CTGCAAGCCC TATTACTTGG CGGCCTTTAA CTCTTATAGA  
ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTTIN CGGTACAAA TNATTTCTCT TGCTTGCTTT CTCTCACCC  
TTTNAATTT TCCTTTCTIN CTTTCTGT CTATCTTACC TTCCCTCCGT GATCCCTGCC AGCCCTCCT TTCTTATTAT  
AGCTGATCAT GGCAGTATTG TTTTITNCTG GGTAAATC AGAGTGGGAT TTAGAGAAAG CTTAGCAGGC CTAGCATGAG  
GGCCTTAG

SEQ ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAAA TGCAGAAAA CAACAGCAA AATTGATTGT TGACTCAATA TGATATATAG TTCAAATGTA  
AACAAATGCT TGTNAGCATT CCACATCACT GAAGGAAAAA AAGTAAGTTA TTATTTCCAA TGTTGGGAGT TAGGTTGCTA  
TAAGCTTATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCATTCTCC CCTCACCACA CATCACCCCC  
TTGCTCCTCC TCGACACGTG CAAAATGATA GGCATGTGA GGGGTTGTAG TGAAATNGAG AAGGCATGCC CCATCTCAAG  
AAACAGGGTG GACCAGCCAC AGCTTTCAGC TCCANTTGT GATACAGGAA T

SEQ ID NO:924: (Length of Sequence = 371 Nucleotides)

ATGATCTGCT TTTTITGAT ACCTTTACTT TINAG AGNGCGGGG TTTCTGGAGC CGACTGAGGG ACTGGAGAAG  
GCTACGGGGG TCCTCGCCCT GCCAGGGCAA TCCTT CTCTTATCA TTTGGTTATG CAAATCGCGG TAAAGTTTTT  
CGAAGGGG TGCTGGCTCC TCTTGGCAGC TCTCTTGT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC  
GGCCTCTG GCGCGAGGC GTCCGGCTC CGAAGCACT GCCATGGCCC GGAATAGCAG CCCNGAGCA AGG

SEQ ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTTG CCATAGGACT GATGGATTAA CCAGTGTTCG GCTTTATTTG AAGTCTATGC CCTGCACAGC  
TCTTGTATGT ATTNAGATG CTAGAAGTTT TTNAGCATG TNATGTGTA TCTTGTITG AATCTAGGN ACCTGTCCA  
ACTTGGTTCT TTTTCAAGGT TGTTTGGGT ATTCTGGTC CCTTCTTT CCATATGNAT TTNAGGATCA GCTTGTCAAT  
ATCTGCAAAA AAAAAATCAG CTATATTTTG ATAGAGNTT GTATTGCATC TTTAGGANIG GTTTGTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GTTATTCATA CCACAGCATT TAAAAAGCAA TCCGCAAGTN ATAAAAAAA AAAAAAAA ATGATGTGAC ATATCCATTG  
CCTGANITGC CTCTTTTGTG AGCCAGTNTT GGGATTATAG CAGAGGAGTA GCAGAAATAA NTATATTGAG ACACAAACAT  
ATAGATATAA TAATATCCAA CCNCTTATA TGATTTAGGG TCTCGTTAAA ATGGTTACCA TTTGCTTCTC CTAAANITA  
TATAAT

SEQ ID NO:927: (Length of Sequence = 286 Nucleotides)

GGCTGTCTAG AGAATCACTT GAACCCGGGA GGCGGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT  
GACACAGCAC AAAAAAANC AATGTTCCAC AAGTCAAAA TTGINTTCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA  
AGGGTATGAA TGACTAAGTT CCTTCTATAA TATATTGACT ATAGGTTAGG AGATACACTT TCAGTTCTG TTTTNGTAG  
ATCTCCCAAT GATCTGTCTT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CTTGTTTAA CAGTATTTAT TGCACATGGT TTTGTTATCT ATTGCAATGG GTAAATTACC CCATCTTTG CTCTTTAAAG  
CATTAGACAT TTCTGTAGGT TAAGAATTCA GAAGCAGCTT AGCTGAGCAG TTCTTGCTCA AGGTCTGTCA TGAGGTTGCA  
GTCAAGGAGC TGGCCAGGGC TGCACTATC TGAAGGCTG ATTGGGGCTG GAAGACTCCC TTCCAGATG GCTCCCTCAC  
AGGCTTGGCA TGTCAAAGCT GGATTGTTGG CAGGGGACCT CCATCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC  
ATGGCAGATN GCTTCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA  
CCCCACCCG GAAGGTTCT AGCAGTGGG ATTCTCCAG TGACGAGGAA GAGGAGCAA AAAAAACCAT GAAAAATAAA  
CCAGGTCCCT ACAGTTCAGT CCCCCGCT TCTGCTCCCC CACCAAAGAA GTCTCTGGGA ACCCAGCTC CCAAGAAGGC  
TGTGGAGAAG CAGCAGCTN TGGAAAGCAG TTAAGACAGC AGTGTAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA  
ACCCCAACT AAGGSCAGTA GTCTCTAAAG CAACCACTAA ACCACCTCA GCAAGAAAG CAGCAGAGAG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAATCTCT CTTCGGACAA TATTGGCACT CCATTCAAAC CTGTGTTTCTG GTCACTCCGC ACTTCATCAT  
CTCCCAATTT GTCCAAACA TACTGTAGCT CAAGTACAGT TTTTAAAGT TTCTGTCAG CTCTTCTCT CATAAGCTGC  
TCCGAGCTG CTGTCTCTT NATTGTTTC TGAATATCTT GACTTAGTGC CATG

SEQ ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGTNTC ACAACATGA TGCTTATCTA ATAAATATC ACTGAGCAAT AAGGAGAAAT ATTTTAAATA GATTGAAGT  
TGTAACAAA TAATTTAGAG TCCAAAGAGG ANAAGANAA TTAATCTGT TTTTATCCC TAGAAGCTAG AAATTTTACT  
GGATTGGTCA ACAAGACAA ACTTTTTATT GTATAAACA GTAGANTTCA TGGAAAGGAT AATNCITTTG GAACAGGCTT  
CTCGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTGGGG GCCAATATA AAGCAAAGCT GGAAGAAGGG ATGATCCATG TATTINIGGG GATGGGATAT GGACAGGGAA  
ATAGTGTCC AACTCCATGC TGAGTGTGT TTTGAATGT AATGTGAAGT TGCCACCATA CCAGGGCTAT GACTGTINTAC  
GATGTCTCAC CCTGTAGGC TAGTAGCTT GCAGTGGGAA AAGATGACAG GGCCACTGT CCAGGGCATT CAGGTAATAA  
AGTCCCTGAG CTCCAAGTTG CTAGATCTAA GGAAGTATT TTCCCTTCAT GTCAAAGATG GGG

SEQ ID NO:933: (Length of Sequence = 186 Nucleotides)

CTCTTTTGGG CTGTTTANA TCTCCGGCGA ATTGAAAGCA GTGATCTCTC AGGTGCTAAC CGGNATAGTA TTAGAAGACT  
CCAATATCTT GCAGCCTGTG GGACTTACTG TATTTATCTT TGTTTGTGT CATTTGCTTT TGGGTTCTTG GTCATGAGGT  
TTTGCTAAG CCAAGTCTT CAAGGG

SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACATTTT CATTATATATA ATTTGCTACG TGTTCTTTGC AACATAGTGA  
AAAATAATCA TGCTGTATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT  
GAAAGGTTAA ATAGCAAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTTATAT GAATACTCAG  
ATGGATGGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NTTTTAAAAA TAGCTTTGTC TAAAGATTAA  
AAATTAAAGG TTCTAA

SEQ ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAGAAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAAG  
GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA  
AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACTTTCA GTCTTTCTCC ATTTCTTGAT GTCTAATGAG  
GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TTNAGGTGCA ATAATACAAC  
TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCTTCTIN AACTTINATG AGCTGCCINA GCCGCCAGCC ACCTTCTGTN ACCCAGAGGA AGTGAAGGG  
GAGCCCCCTGG ATGCCCCCCA NACCCCACT CTGCCCTCAG CCGTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA  
CCTGCTAACC AATNGCGAGA CCACCCAGAA GGAGGGGACC CAGG

SEQ ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTGGCC AGATAAAGTA CAGAAGGCC AGTTAACTT GAAATGCATA TGANCAAGAA ATATATTTNA  
GTATGANIAT GTCTCATGCA ATATTGGGA CATATTATG CTAAAGAAAG TATTCACAGT TTNCCAACA TTCAAATTGG  
AATGAGTGTC CTGTATTTIN ATTTGCTAAA ATGGGCAACC CTAAGCTGGT ATCTCTACAG TTACATACAC TTACCAACCC  
CACCCATTCA TACTGGTCCA AGTTACACCC CAAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA  
AATGTTTCAT TCTGCCITCT GGATINCTGT ATGAAGACTT TIGTTGIGAA AGATATGAAT AGAACC

SEQ ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTTTCA GAATTAAGAA GCCTTGCCCT CTTGCGTGT CTTACAATT GINTTAAGTC TATTATAGTA TTCAITTTAG  
TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTTGACAT  
GGGTCTGCTT CCGATGTATC TTTCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC  
TIGGTGGAAA GAAATCTGGA CATTTTINCT ATGAAAAAAA AGTTAGGTTA CATGGCATT AATATTTTGC TAGACTTAAC  
CTACAGAAAA TGTTCAAGC TTATAAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAAGC CTCACAAGAA ATAAGGTGCT TATGGTGTTA AGTTACAATG GAAAATAATC AATGGCATTG GTATGCATGC  
TGCAATGTGT ATGTAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGTGATCA TCAAAACCCA  
GGCTGTGGAA AACTGTCTAGT CAAGTTTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAATCTAT AGATGAAGCA  
ATTTAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAATAAAGG ATTAAAAAGA TGACAGAGAA AGGGTTTAAA  
AATTTGTAAG ACACGGCTGG ACGCGTGGGC TCACACCTGT AATCCAGCA CTTT

SEQ ID NO:940: (Length of Sequence = 385 Nucleotides)

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GTAATCCCAG CTACTTGGGA GGCTGAGGCA TGAGAATTTC TTGAACCCCG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC  
 GCCACTGCAC TCCAGCCTGG GCAACAGAGC GAGACCCTGT NTCAAAAACA ACAAATATAA TTTCCTTTTA ACATCTGTNC  
 CAAAAATGAG ATAAGCGTTA TCAGGGCAAG TCCATCCTCA TCACTCTTTC CCTCCCCACT GCOCTCTCCA CGATGCCCAG  
 CTGATCAAAA GTCAATTTTTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTG ANCATCAGAA  
 ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGT ATATAATACA GCTTC

SEQ ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TTTTACCAAC AATTGCTTGT AGCTAATGTA GAACATACTT GAGAAAATGG CTTCTGTGAA AGACCAGTTA  
 GTACCAAAAT AATCTGGCCC AGAAAAATAG CCACCATTCT TGAATACATT AATAGAAATA GAATAACCC CAAAGGGAGA  
 TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTG TGTCACATTG GAGCTCCAGT GCTTTAAAGC  
 TGAAATGAAT CCTGGCCTTT CACCACCTC CCTGCCATA GTATGGTATA TCCTCTTATT CCTTCCCTCT TAGCTTACTG  
 AGAGTGTAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAGA GATGAATTAG CAGTTAATGG  
 AGGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTTCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG  
 CATCCGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCCT TGAAGCAAA CCTGCCANTG GTTATCAAGC TCCTTACATA  
 CCCAGCACCG ACCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGNGAA CAGTCAGACT TCTTCCAGAG CCTGCAATTT  
 CTTCAATAAT GTCGGGGAA ACCTAAAGGG CTTAGAAAAC TTGGCTCCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GTGCCATTAC AACTTNTCTG TAACCCTGAA ATTGTGTCAA AGTGAAAATT TTTTAAATGA GATTATAAGA GCATAATCAA  
 ATTGGAATTT CCTTAGGATA CCAGAGAATC ATTTCCTCT CAGGTAAAGG ANTTTTCCTT TINGTAGTCC AGAGCTATAC  
 ATGATTAGA AANTGTTCAG NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEQ ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCACTC AGGCTGGCTG TCCCTTTNNT CCTCTGCCC ACCCATCCA CTCTGAGCAT CAATGCAGCC GGCCAGTTGC  
 AGGCAACCAG GCAGCACCTT GGCTGCCAG GCAGGCTAAG AGGCCCCAC CCACTCCCC CTCTTTGCC AGTGGAAAAG  
 CTGCGGTAG GCATAGCTTT CCCAGCCTTC CTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA  
 CACTCAGGCG ATCCCTTGTG CAAATAACTG GAGGAGAGGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA  
 GTTGGCT

SEQ ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AATACACCT GAGTTAGTTT TCCAAACCTT TCCTCTGAT TAAATGCCCT TAAACTTAA ATCTCTTGT  
 ATCTTCAGTT GTGATCTAGT CCCAAGTGA AATTACGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG  
 GCTGCCTAGG CANTTTATGA TTAGTTTCAC AGAATAGCAC CCACTGGCTA CACAGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCTCATC TAGGTATGTA TATAGTTCAT TTATTTAGGG GTGATGTAA AAAATTGAAT GCCCTTAATG  
 GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACCTTT TCCCTGTG ACTGTGTGTA TTGGTATGGA AGTATTTTTT  
 TTTTCTCCCA GCTTTTATT CAGGTTCAG GGATACATAT GCAGGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT  
 TAGTATACAG GTTATTTTAT CACCCAGGNA ATAAGCGTAG TACCTG

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SEQ ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGTGCAT TTNCTCCCCC TTGAAAGAT TTATGTAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CTCCTGANTG  
GGGAGATGTT GTTAAGCAAT CTGGATTCTT TCCAGAAAGC ATGTATGANC GTATTCTCAC TGGTCCCGTT GTGAGAGAGG  
AAGTAAGCAG GCGGGGGAGA CGGCCTAAAA GTGGAATTGC AAAGGNCACA GCAGCAGCAG CTCTGCAATC TGCCACCAGT  
GTTTCAGGCA ATCCTTTTGT TTAAGCCAAT GGACCTACTT CCAGGGNGTG GGNCTCACA AACTTNTTTC AGGGCCTTAC  
AACAAAAACC TACAA

SEQ ID NO:948: (Length of Sequence = 216 Nucleotides)

GGATGTAAGC TCCAGACAG ACATCTCGGG AAGCTTCGGC ATCAACAGCA ACANTCAGTT GGCAGAGAAG GTCAGATTGC  
NCCTTCNATA TGAAGAGGCT AAGAGAAGGT TCGCCAACCT GAAGATCCAG CTGGCCAAGC TTGACAGTNA GGCCTGGCCT  
GGGGTGCTGG ACTCANAGAG GGACCGGNTG ATCCTTATCA ACGAGAAGGA GGAGCT

SEQ ID NO:949: (Length of Sequence = 369 Nucleotides)

CCCTTCCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTACTGCAAT TACCATGACT  
CTAAGTGACC TTCTTGCCCA ATGTTTAATG CACAATGGAC CGTGCCCGAG GAGACCTGGG CATTNICTGT TGCTTTGTTT  
TACAATGATC CCTTCTGTTT TAGCAGCGTG ANTCACTGAT GGTCACTCTC TCTGAGGACT GTACGCATTT TCACCTTATA  
TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAAGTTTA TTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA  
ATAACCATIN GTCACTCTTT AAAGGAATGG TATTTAACAT TTATTTATA

SEQ ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGTGAAA TAGAAGTCCA ATTACCTGGG GAACTTTCAT CTTAACCCTC TGGAAATTTC AGTCTAACCT AAATATTGAT  
ACTACACCTG CAGCAGCAAT TAGTTTAGCA TGTAGTGAAA AAGTAAGTCT AAAAAATATT TNCATAATCT TTGGTTCCCTA  
AAATTGTTTT AAAAGAGATG CAGTGACATA TGTCTGGAGT TTGCTTATGG CCAATAGGTT AATGCTTCTA GCTTCTATGC  
TTATTGCAA TTTTAATTAT GTGAATATGC AATTTTCACT TATATTTG

SEQ ID NO:951: (Length of Sequence = 302 Nucleotides)

TGTCACGATG TTACAAGAAC GATTCCGGGA GTTTNCCCGA NACACCGGGA ACATTGGGCA GGAGCGCGTG GACACGGTCA  
ATCACCTGGC AGATGAGCTC ATCAACTCTG GACATTCAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA  
GCCTGGGCGG ACCTCCTGNN GTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCCTAT GAAGTGACA AGTTTTACCA  
CGATGCCAAG GAGATCTTTG GGCGTATACA GGNCAACAC AAGAACTINC CTTGAGGAGC TT

SEQ ID NO:952: (Length of Sequence = 302 Nucleotides)

TTTTTTTTINT CCACITCACA GTTGATGCCA ACCCAGCCTG CATCACAGAG ACACCTATAT CCACTGAGAC CTCCAGTACA  
GTTTCCATGG ATGCAGGGAT TGCNCAGGCA TTCGTTACCC TGTAAGTAGC AGCTGGGGTG ATGGGGTCCC TCGGGGCATA  
TACAGCGGAA ACCATTCA CAAGTTGATC ATGTGNCACC CTTGCGACAG GGATTGGNGG CACACTCATC AATGTCAATG  
TTACATCTCT GGCTGTGAA ATCCTGGTGA GCAGACACAA CTGTAGCGAT TAATTGCCAT CC

SEQ ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAAATNAAC TTGTTTGAA AAGTTAGTAT GGGTTAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT  
TCATGGCAIT CTCITTTAAT ATGGGCTTIN CTGTGTAGT TAACATCTGA TAATATGACC CCCCATCTA TTAATATTTA  
TTATACTCAT AAAATTACAG AAAAAACCTA AGAAAGGGTA TGTATTGAAG TGAATGAAT AAATGCAAAA AATGTAGTAC

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TTATAACATT TTGAAGAAAA TCTTTAAAAA TNITTGTTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTTAAA AATAGTGAAG TCTTTATAAG TAATTTTAA AAATTTAAAC TAGGACCATA AATTCTTAAA CTATGAGATA  
AATGANCAAG AAAACAAACA GGTGTTTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACGTGA TTTTAAATGA  
GANTTAACAT ATTTTNNITT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEQ ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTTGATAG AATTTTCTAG TGAAACCATC CTGACTGGG GTTTTATTTT GGAGGAATTT TAAGTTATTA ATTCCGTCTC  
CTTAATAGTG ATAGGACTAT TCAGATTACC TTATTTTATA TTGGTGAGT TTGGTAGCT TGTGTTTCTC AAGGAAGTGA  
TCCATTTTAT CTAAGTGGC AAATTTATGT GTGTATAATA ATTTGTAGTA TTCCNGTATT ATCCNTTGA TGTCTGTAGG  
GTCTCTAGTG ATATCCTATG

SEQ ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCTATTAAA TCATTAAGCA TIGCATGCAA TACTTTTNCCT GTGAAAATTA TTAACCTCCT GGTATATAAA ATTATTTCTA  
GTTAIGTTTA AATATTTCCN CTGGGATATT ATCATCTTAG ATCTGTAAAG TGGTACTAAA ATAGTTAAAA ATTATTTNTA  
AGATATACAC AAACAGAAAA ATATAAAANC AAATGTATCT TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGTACCAG GTGTGGAGCC TAGAACAGAC ACCAGTCAGA AGTGCAGATA AGGTCTGACT TTCCAGCATA GCCAGGGGAC  
TTGGCTGACT CCACATGTCC CCAGGCCCTTA CCTAGCTGTA AAGCAGGCAG GTTGTGAAGT CATAGTGGCA GTTTATGAAA  
TATTTAGGGG ACCTAATAAT CTTTAAATTG TATAACATTT CTGTCATAAA TTTCCTTTCA TGAATCCTTT CATGACTTAG  
ACCATCTATG ACATGCTTGG ACTTTCTGAC TTGTCCTAAC CACCCCTCTC TTTAAACAAC CAGTCTTTTT ACTTTAGGAC  
AAGAATTTAC CATACAAGAT TCITTTGTAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAAATGA ATTTGATAGC AGATTGTAG AGATTATTA CCTATCATAT GCCAAAGCCA CTTCCTACAT GTCAGTGCTA  
AGGAATCCCC TAGAGATGGA ATTCTTAGGT TCAACTGAAA ATTAATGTGA ATTAATATAA TAGGTAAATT CATTGTAAAT  
ATTTTAAAGC CTTTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGTAC AGAGAACACT TGATGAGAAT  
GINCTAGTAA TAAACCTTAA CCTCTGGGG AAAAAATCCT ACTGTCTTTC CTCTCTGGCTT CGTTCTTCTT GGAACATATT  
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCTA CAAGGTGGNT GCATAAACAT GCGTGGGCCC AGATGGACTG  
TGCTCATTTG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGCGGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGC ATTTGGGGAA TTTNAGAGAA  
AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAACAGCA TATCTTAGTC CTCATCTAGG GTATAAAACA  
GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTTC TGTGTGTTTA AGCCACCTAG TTGTGGTCAC TTGTTATGGC AGCCTTTGGA AACCACACA CCGGCACATG  
GCGTGTGTTAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GGTGTGGTC ATCAGCAATC TCCAATACCT ACAGCAAATG

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GGAAGACAGG GAAGGACCAG AGGTGTAGGT AAAGCAAAAA GCCACAGGTC ATTAGGAAGT GATGCTCCAA CTGGGCATGG  
AAAAGGAGTT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGNTCC AGATCTCTCC TAGGGGAAG NAGGGGCAAC  
TTAGGACAGT TTTTGTGTCT GTGGG

SEQ ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTGTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTTCTTCC TTGCCACAT CAGTGGGTGA  
GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA  
GCATOCCTTC CTCCCGTACT GAAGCTACGC AGGGCTTGA CTATGTGCCA TCAGCTGGTA CCATCTCACC CACCTCCTCA  
CTGGAAGAAG ACAAGGGCTT CAAATCACC CCCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT  
CATAGGG

SEQ ID NO:962: (Length of Sequence = 369 Nucleotides)

AATTTAGATT TGCAAGTTTT CTACATTTTC AAAAAACAAA AACAAAAAAA CAAAAACAA ACAACAAGAA ACGTAGACTA  
GTTGGGCTCT GTCATGCCCC GGACATGAAT CAGCCCCICA TCCAGCTTCT CTGACCATTG GTCACITAGT GGTCTTCTTG  
GTTTTAGAT AGCAAGAAGG GTGATTACAG CACGATATTT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATG  
TTGCTGTAA TCTCTCACTG TNCITTTGTA AGCTTTATCA TGGTATTTAC GTAGAGGAA AAAGCCACGG TATAGATATG  
TAGGGTTCCA TACTATCCAG TCTCAGGCA TCCACTGAGG GGTCTTCTG

SEQ ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAAACACC CGAGGCGGG AGGAAAGAGA AGCCGATGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG  
AAAGTGGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGTTT CGGAGCAGC AGGCGACGG  
GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAAATTN GAGATCTCCG ACTCGGCTCC  
CCCAGCGCG CTGGTAAAG AAGTCACCA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCAG TATAGACAGT CGTGAAGAAC AAGGCTGAGG GATTTTNAAG TAAACCCATT TTCAGGATGA CTACAATCCT  
TCCACTTCTA GAAAACITAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTTAAC AATTTCCCA ACACCTTTTC  
CACTACCCAA GCCCGTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCATCT GGGTTCAGAG GCAATATGAG GAGGTTGGGG  
GGATGGCAGG GGCATCCTCA GGGTTGGGG GCAGGCCAAG GGGATGAGAT GGCAAGGAC AGCTTTNGGA ATCAGATAGA  
CGATCCAGCG TGCCTTCTA CACTTGCAT

SEQ ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTGAGAAC AAGCTAAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTTGATG  
CTGCATGCTG CTGATGTTGA AGCTCTACAA GCTGOGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA  
AGAAACAACA CAGAAAGCAG AATCAGATT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAAGGATG  
AAGTTTCCAA ATGTGTATGT CGCTGTGAAG ATCTGGAGAA ACAAACAGA TTACTTCATG ATCAGATCGA AAAATTAAGT  
GACAAGGTG TTGCCTCTGT GAAGGAAGGT GTACAAGGTC C

SEQ ID NO:966: (Length of Sequence = 163 Nucleotides)



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CTGCCTTCCTG GGTTCACGCG ATTCINATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCCAGT  
TAATTTTGT ATTTINAGTG GAGATGGGGT TTGCCTCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA  
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GIGTCAGTAA TAATTTGTAC ATATTATINC ATCACCAGG TGTAAGCCC AGINCCCAAT AGTTACCTTT NCTGCTCCTC  
TCCCTCCTCT CACCCCCCTG CTTCAGTCT ACCCCNGTGT TTTCTTCTTT GTGTTCCTAA GINCTTATCA TTTAGCTCCC  
ACTGTAAAGT GAGAACATGC AGTATTTGGT TTTCTGTTC TTTGTAGTT TACTAAGGAT AATAGCCTCC AGCTCCATCC  
ATGTTCACAC AAAAGTCATG ATCTCATCT TTTTATGGC TGCATAGTAT TCTGTGGTGT ATATGTACCA CATTTTCTTT  
ATCCAATCTG TCATTGATGG GGCATTTAGG GTTGATTCCC TGCT

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GTGTATAGTA ATTTAATAGT AATTAAATGT AGAGTATTTG TAAAAACAAG GAGAGGAAAA AGAACAAATC ATATTTGAGA  
ACTCCTAATA ATCTTCTAGA GCAGAGTCA AAGAAGCAGT GGTAAAAATA AAGCCAAAGA GATATAGGGG CTAGTCTTAG  
AACCAGGACT TCCTATAGAA CCAGCTTCT ATAGAATCTG AACTTTATCT GAAACTCTTT CACAGATCTC CTCACCTTA  
ACTTCCACAA AATAAGAAAT TTGGATTTTG AAGGCAAATT TGTATATTTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG  
GTTTGCAGAT ATCCAACAAA TCCTACCCAA ATCACTTTTC CAGCTGCAGA CTGTGAATTT CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTGAA GAGACGGGTC AGGAACAGC GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGTN  
CTCATCTTTG CTAATAAGCA GGATTGCTC ACAGCAGCCC CTGCCTCTGA AATTCAGAA GGACTGAACC TGCATACCAT  
CCGCGACCGA GTCTGGCAGA TCCAGTCTTG CTCAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA  
AAAATGTCAA TGCAAAGANG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTCGGGA GCGAATTCG GGCCTTAAAA  
ACACTAATTT GCTGCTTTCT

SEQ ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTTAAGATG GGATCTCAGG GTTACCCAGG CTGGAGTGA GTAGTGGCTC ATAGCTCACT GTGGCCTCAA ACTCCTGAAC  
TCAAACATC CTCTGCTC AGCCTCCAA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCTGGCTAA TTTTAAAT  
ATTTGTAGA GATGGGCTC CACTTGTGT CACAGGCTGT TTGCTTGATT CTTAAGAAG TATAGGGATC CAGCTGTACA  
GAGCTTCTG CAGTCTTTG TAATAGAAIT AGTGTATAA ATGTACTTA TTACATGAGG CATCAAAGAC CTTGGAATAA  
AGCTATINCC TCACATATCT GGGCCATTAT TTTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TTTTGAATAA AAGACTCTAG GTGAGCTTC ATCAGTGCCT GCTTTGNTC CAAGATGTAA  
TGAGATTCTN CTTTACGTC AACAAATGCC GCAAAATNCT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA  
TAACCAAAC AAATTTGAAT CCAAAGGTA GATGTTGAGA GTCTGTGG TCTGCAGCT CAGGCTGTG AAGTTTGTG  
TAGTCATGTC CACTTCTGGA AAGAGGATC CTGTNCTCT CAATGTGAGG GAACGGGAGC TTNGGGGCAT CAACCTCACA  
TTTTCTTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCTTTTACA TCAATATCC TCAATGGAAG AGGGGATATT GCACACAAAT ATCATAAAG CACTACATAT TACTTTCACT  
GGAACTAAT TTNCTACAT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATAACAGC

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TGCAGACTGA CACAAACACC ATTCAGAACA AGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GGGCTCAAGA CCACTTCTTT  
CCAGTGCTGG AAAGAGGGGC TGCATGCAGT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GGGTGTCTC GAAAGGGCAG  
CCCGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAAGTCA GAGAAGCTGC CTATTT

SEQ ID NO:973: (Length of Sequence = 401 Nucleotides)

TTCTCAAAC TCCAGTCTC TTCTGGGCC AAGATCTGGT CCACCACTGC CGTGGCCTCC TTCCCCTGGC GGATGTTTC  
CCGCTCTGA GCAGAGAAAC TTTTCTTCCC AGCAACTTCT TCATCTGATG GGAGGAGGGA ACTGAATAGC TTTCC  
GGGAGATAAG AAAGAAGAGT GTGGTGTGAA CAGGGAGCTT TGAGCTGTGG AGTGGGCTG GGCATGGAAA ATNCGG  
GAGTAGCAAG GAATGAGGGG CTTGAGAGAA CTCTNGGATC AGCCCTCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG  
AAAA AGGG GCTTCTATGA TGAGTCTGGC AGCTNCCAC ACTGCATTCT CCTCTGCAT TTTTTTACCA TGCACCAGGG  
C

SEQ ID NO:974: (Length of Sequence = 311 Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTTGTGCCAT  
CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT  
CTGGGGGACA AGATTTCTC ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG  
GTGCTGCGGG AGTGTGCGGC CACATTCTTT ATAGCCACAG GCTTTCGTGG GACTTNCCTT GGGTCTCTC CCTATTGGC  
TGGGTGGACC ATAAGCGCA AGTGAATGTG GCAAACITCA ATTACAATT AA

SEQ ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTGG ACAGCTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TTTAAATAAT  
ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCTAAAAAC ACAACATCAG ACATAACATC ACACATTTGT TCCAAAGGAC  
TAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAGGGACA GTCCCCATCT TTCCAAGGAG  
TGTTTTTAAA GAAGCACTAA CTCTGGTAGG TTATCAAACT ATTTTTCAT TCTAAATAAA TAAAAGACTA ACTGAAGGTC  
TCAGGTGCAC ACTTATTTTT

SEQ ID NO:976: (Length of Sequence = 343 Nucleotides)

CTGTTCCTTA AATATTATTA AAATTTTAAA AATTAGACAT TTGGTCTAAA TTAGACAGGT AAGATACTAC TGCTCTTACT  
AGATGCTTTA AAGTCATAAA CTGCTTCTAT GGCCTTTTAT AATTGTCNAA CTTGCTTGCT TTAGAGCCAT TGGATTCTAG  
GTAAGGCTTA GAGACATTG GAGTTAGCCA TGTCCTTAG CTAAGCTAGA AAGAGTCCGA CATTATCTGT GGTCTGTCC  
TGTATCTAC ACTCTACACC TGATACATAA TTAAATTTAC TTACACTAAA AATAAAAATG GATGCATTTT TTAGGTAGGA  
AGGGTATGGG AAATTATAGG TTT

SEQ ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTTTGTAA TATCAGTGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATTGGA AGAATAAATG ACTAAATGAC  
TGTATCAAAT ACTTGCCCAT TGTTTGCTGT TTCTGANTG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGTGA  
GAATATGATT CTNTACCTT AGTAAGAGAG CCATCAGTTT ATTGGATGAT AGTTATATGG AAAAAGAAGA AATGCTACTG  
TGATAAATAT TTATAATTTT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCCCTGGCCG AGGTGGCCAA GATGGCACTT GTTTCCTGCC TCANAAGAAA AGGCACTGAC GCACTGACCC  
TTNAGGTTG TNGGGGTGT GGTCACTGCC CTCCTGCCGT AGGGTCAAGT GTGTTTTCAA GTCAACTTCA GCAGACCTCA

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TTTAACCAATT TTTTNTTCCC TTAAAAA AAAACCCAAA AAACCAAATC CCAATAAATA TGTTATTTTT NTCCATCACA  
ATATTGCTTT AGAAAAATAA GAGCCGTCAA GCAGCAATTT TTCCT

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GTCGGINCAC ACTCTCTCC TGCTCCCAA ACTCTCATC ATTGAAGCCG AAGTGGTCAA TGAAGGCAGA GGTATGCGC  
TGCACTCGGA AGTCCATGAA GGCCTGCTGC AGCACAGCCT CCTCAGGGAA GTTGAATCC TTGAGCCGGT CGTCTCATC  
GTCACCTGGAG GAGTGTAGGT GGTGGGTGTT CACCAAGTCC ACCATGTCT TCTGTGTGGT CTCCGCCAGG GGCCCCGATA  
CGAAGGCTTC CCACTGCTCC TGCTGCTCGC TGGGCAGCTC CTTCAGCAGC TTGCCGCAGC TGCTCTGCAA TTGGGG

SEQ ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACTGGCTT GCCTTCATCA TCTCTGCAGG GNTCAGTAAA GATTAGAAAT GGATTATTTA CCTTGTATATA CAAATACACC  
TCCTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTATA CGCCTGANTC AATCCCATTA TCTGCATTTC  
TGTTGTGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA  
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG  
ATGCTTCTAA TCGCTTTTAC AAGGTCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTTCTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GTTTATTAAT ATTAAACAT ATTAAATAA TACATGTNCA TAATGAAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG  
CAGTATCCC CTTCAGTTC CACTCTGAA ATAACAGTT AACAAGATGA TGAACATCTT TCCATGATGT TCTCCAAGAT  
TCATATTATT TTGCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCACGCAA GTAAATCCCA GCATTTTGGG  
AGGCTGAGGC GGGTGGTTCA CCTGAGATCA AGAGTTCGAG GCCAGCCTGA CCAACATGAA GAAACCCTGT CTCCTACTAA  
AA

SEQ ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAGGCTG TAGTTCAGCA TCAACAGGGC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGTNTTCC  
AGGTGCCCTC CCTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG  
CCAAAGGCAG GTCATAGGGC AGACTCAGTG GGGGTGGGG CCTGGCTAAC AAGCAATGGA GAGAACGGGG GCCATCCAGA  
GAGGTGGCA GAAGAGAGCC CCTGGGTCAA GAGAAAATT TGGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTTGT TTGTTTTTAA AAGCTGTGCT GTTACTGCTT AAAGTCTCCA AACTGTTATT GAGAACACTG ACCAGAGCCC  
TGTCATAGA CCAGTGTTTT TCCAAGTGCA GATTGCAACT CCTTTCGAGA GTAGGTGTG GAGCCATTIN AGCTGACTAC  
TCACCAGCTT TCTTCAAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG  
GTAAATATTG TNGTGTGAGA CTTTTTTGGG TGAGTGTGCA TGTGTTTACA TACTGENTCA CATTATAACA TGTATTGCTC  
ATTATGGGTT GTGTCAGAA AAAATTCAGN AAACGCTGTC TCAGACTGTC CCAAGTGT ATTTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GTGGTATGAG GTATCAATGA AATACATTTA AGATGTACAT TGGTTTGT TT CAGAAAGGCG AGACAAGTCA AAGCGGGGAC  
TTCCAGGCTA TAGGTAAATT TATACATTTT CTGGTTAAGA TTGGTTGAGT TTGTCTAAGG ACCTGGGATC AACAGAGAGG  
AAATGTTTGG NTTAAGACAA GGATTGTGGA GACCAAAGTT TTAAGTACGCA GAGGAAGCTC TTAGCTAGCA GGCATAAGAC  
AGAAGAGGCT GTAAATGTT TTCTTATGAG ACTGAAAAGG GTGCCTGACT CTTAATGAT TATCTCCTGG NTCTGGAAG

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AAAAAAAAA GGAATGGCC AGGTGCGGTG GCTCAGGACG GGTCTGGTGG CTCACACCTG TAATCTTTCT TAAAACGTTA  
TGAAGTTC

SEQ ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGTATACIT TTGINTTTTT TTCTACTTGT TAGTTGTATT AGTATCAAAT GGCATAATAA AGTTACTTTG TTTGCCATTT  
CCCCTCATC TGAAATCAC AAAAAGCATT TATTTCTAAG ATTTATATCC ACTGACCTTT TCCCCAAAGT TATTTTCCTG  
TTACTTGTAT TTCATCTTG CCCITATTC TTTAATATTT GTATTAGAAT TAGCTTGCTC TTGTTTCCTT CACGGCAAAT  
GTGTTACATT GCCCACTGGG TGGCTTCTGC GGATGCCCT ACCCACCCT CGTCTGGAGC AGAGAAGTCC TGTTAGCCTA  
GCAGCATAGT GGCTGCTGC AGTGCAGGA GTTGTCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA  
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCTGCG

SEQ ID NO:986: (Length of Sequence = 286 Nucleotides)

CGGCGACGAA CATGGAGA CCAGCTTG GAGCGCAAGT CCTCCTGCGG GAAGAAGTGT CGCGGCTCCA GGAGGAAGTT  
CACCTTCTCC GGCAGATC AGATGTTG GCGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCTCTN AGGTCTCTC  
GGCCACCGAG CTCAGGT TTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAAG  
CTGATCGGAA GCGCTTA CGAGAAGA CAGACCTGGT GAGCCA

SEQ ID NO:987: (Length of Sequence = 381 Nucleotides)

TCCAAAGGTT TTCTATC TGGATAA ACAAA TG GTACATCTAC ACATGGAAT TTGGGA GATGAAACAG  
AATGINTGAG GGCACCAT CATGTAT GGTG TG GTCTGCTCC CA TTCCA CAGGCA GT GTGTCT  
GGGTGAGGGG CTGGAGG GGCAGGAG CATC AAC AAGGGTGGAA GC SAAGA CGACCAG TTTACAGGT  
GTNTACATG GTACAACCA GAGACTGGC GTGCTAGAA CCAAGAAAC ACTCAGGACA CAGGACAT CTGCAGGGA  
CCTGGGGGT GGTGAGGAAA GTCGTGCACG GGTGTTGGG GGGAGACTTG GAGGCCCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAAACAGCT TAAAGTTAG TTTAAAAGTT  
GTAGGTGATT AAAATAATTT GAAGGCGATC TTTTAAAAG AGATTANCC GAAGTGANTT AAAAGACCTT GAAATCCATG  
ACGCAGGGAG AATTGCGTCA TTTAAAGCCT AGTTAACGCA TTNTCTAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG  
TGGTAGGATG AAACAATTTG GAGAAGATAG AAGTTTGAAG TGGAAACTG GAAGACAGAA GTACGGGANG GCCTCCTTCA  
TGTTTACAAT TTTAATTAAT TTTTTTTATT TTAGNGTAA TTCTTTACCA AACATTACCC A

SEQ ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCTTGGT TTGCAACCT CTGCTCCTG GGTCAAGCG ATTCCCTGC CTTAG TCC CAAGTAGCTA AGAT 3  
CATGCGC TTGCTGGC TAATATATAT ATATATTTT NTAGTTTITA GTAGAACGG GGTTCACCA CGTT 3  
GCTGGTCTCG AACTCCAGAC CTCAAATGAT CTGCCCGCT TGGCTTCCA AAGTGTGGG ATTACAGGCA TTAGCCTG  
TGCCTGGCCA ACAATATATA TTAAATAAGC ACACATACAA CAAAAGTAGG TGTGGTAAG CTACAAAAA TGTGACCAAT  
AGCTTGCTGA AACCTAATTT TTTATTTGTT CATGGAATTT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA  
ATCTTTTTTA GTGCTGTAG ATGAGCAAT GG

SEQ ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTNTCTC TCATTAGCAG TTTCAGTCCA CAGCTGGGT ATTAAATTG TNAGTCATG AAATTAATCC  
CTGACTGAAT TGGAAAGGAA TTGTATTGTC AGTATTGGA TTTATTTATT TTNCAGGTAT GGAATTCCTG TGATTTTGAA

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AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTTG TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA  
 GTTTCATTTT ACTTTTTTNA TTGTTGTGTA GACGGAGCTC ACTTTTGTCA CCCAGGCTGG AGTGCAGTGG TGTGATCTTG  
 GCTCATGGCA GCCTCTGGCT CGCTGGGTTT AAGCGATTCT CCTGCCTCAG CCTCCGAGT AGCTAGGACT ATAGATGCTC  
 GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGGCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG  
 CCGGCTAGAA CAGCGTTTCT AAGAATCCGC GCCACAGCAG GTCCCGCGAT GTTGGGGCCT TAGTGTATC GAGCTAGCCC  
 CAATCTCAA CCCGATCTTC AACTTCTGGT AGTCTTACA GAAGTCTCTT ATTGAACCAG CCACTNTGGC CAGGGAGAAG  
 TAATCTCTG ATAGTTGAGG TTCTTNTCT TCCTCTGGAG CAGATAGTGG TGTCTCTCC CCACAAAGCT CATGTTCTGC  
 TGGAAGAAAT GGAGATGGCG CCCTGGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAA TGGCCACTAC TACCCTTGG CTCAGAAATG CTAGTCTTTA TTTNCTGAAA TGTTTTATAT AGAAAAATT  
 TAATAATAA TAGACATTCT TATATATTTC CTTACCATTT NAGATTGGT TAAAAAGTAT GNGACTTCC GGCCGGGTGC  
 GGTGATTCAA GCCTGCAATC CCAGCACTTT GGGAGGCGGA GGCAGACAGA TCATGAGGTC GGGATCTGTG GCTAACACAG  
 TGAAACCCCG TCTCTATTAA AANTACAAA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCCGCCACCG  
 CGGTGGAGCT CCAGCTTTTG TTCCCTTTAA GTGAGGGGTT AATTCGAGC TTGGCGTAAA TCATGGTCAT AGCTGTTTCC  
 CGTGTG

SEQ ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGGAAGGAC CGTCCGGGA CCCCAACGAG GCANTGCGGG AGTTTGCCAA GGAAATTGAC ATCTCTGTG TCAAAATTGA  
 GCAGGTGATC GGAGCAGGGG AGTTTNGCGA GGTCTGCGT GGCCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTNTGG  
 CCATCAAGAC GCTCAAGTGG GGCTACACGG AGAAGCAGCG CCGGACTTC CTGAGCGAAG CTCCATCATG GGCCAGTTGG  
 ACCATCCCAA CGTCATCCAC CTGGAGGGTG TCGTGACCAA GAGCACACCT GTNATGATCA TCACCGAGTT CATGAGAAT  
 GGCTNCTGG GACTCCCTTT CTTCGGCAA AACGATGGGC AGTTTCACAG TTCATCCAGC T

SEQ ID NO:994: (Length of Sequence = 384 Nucleotides)

GTTCCTCCAG TTCGGAAGGA TAAAATCAA TTCCCACTTT CTGGGGTGA TGCCCAAAC CTTCACACT CAAGTGTCT  
 CCAAGTGCAA ATGTCAAAAT GGGAGGAGGA AAGGGTTTAA AAATTAGAGA AAATGTATG CACTTACGGA CTTAAAAATC  
 CGAAAAACAT AGTAAAAAGA CAAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAAG CAAAATATA AGGGACATTT  
 TTCACCTAAA CTACCTAGAG GGATTTTTTG TTTAGTTTTT CTTTTTCTT TTTTTTTTCA TTTCCAGTT AAGTCCATG  
 TCTTTTGA AATCCAATA CTTAACTGC AAGTCTGCAA TCGTCTCTGA AGTCAGTGAA ATTA

SEQ ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTTTAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGAACA CTAAAGTATA GAATAATAGC  
 AAACAGAAG AGCACCTAC CCCTAGGGCT GAGAAAGAGC ACAGGGAAGT CCTTTTTTNT TCCTGGACAG AGATCCAGAC  
 GAGCTGGAGA AAGAAGTTGC TATGGTACTG CATCANTGGA ACTTGCTGGA AATCCACCCT CAAGGGCACT AGGAAAACCT  
 GTTCAGGGGA GCTGTGGAGG GAAATGGGGT TGGCAGGAAA GCTGCTGGGC GCGGGGTGCT TCAGACTGCA GTGTATTGCA  
 GGAGCTTGGG CACTGGGGAA GCTGTGTGCA CTGAGGATC CTGCTGAGC AGCACATCAG ATCAGG

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SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGOGCCAAC TGCAAGAAGG AGGCCATCTT TTACTGCTGT TGGAAACACCA GCTACTGTNA CTACCCCTGC CAGCAAGCCC  
 ACTGGCCTGA GCACATGAAG TCTGACACC AGTCAGCTAC TGCTCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA  
 ACACTAAATA AGTCCTCCCA GGGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA  
 GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCAGGCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT  
 GGAGTCACCG TCGTCCGTA CNGCAGCAT GGGCAGTGCT GGTGGGCTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC  
 CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCACTCT TTCACATCAG  
 GTGGTCTCGT GTGGGCTGCC AATATGAGCA GTTCTCTGC AGGCAGCAAG GATACTCCGA GCTACCAGTC CATGACTAGC  
 CTCCACACGA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CCTTGTGNTT GGACTGACCA CAGGCACTCA  
 CG

SEQ ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGTCTGT GATTGTAAG ACTCACAACC ATGTGGAGAG GCCGAATCAC GCAGGAGAGC CACGCATTGG AGTACCCTGG  
 CTCCAGCCC CTCCCCACC CGTNTTGAG CCAGAGAGCT ACAAGCAGGA ATCCAGTGC AGCTGCAAAT NATGGCCATC  
 GAGGAAGTCT GTGAGAAGA GGCTGGGGC TGTGGTGCTG AGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT  
 CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEQ ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGTTT TGGAGCTCGA NATCTTCATG GGTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG  
 TNCCCTCTCT GGCTGTGCA GAATGTAAAC AGCAGACTCA TACTCAATGG GCACTACAGG CTTTATCAGA CGTTTATATC  
 AAGCCTGGAT TGCTTAGTAG GGAATAAGG CATCTCTGA GGGGCTTTC CACTTAGATT GAGAATTTTA TTTGAAAAGA  
 ATCTGGTTTA AATGGCATTC TGGTCCGAGG TAGCTGCTCT CCCCAGTGA AGCTGAGCCG AAATATAAGA ATAATATATT  
 T

SEQ ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TTGCGCTCT TTNATCTGCC AGTGACCTGA ACCACGCAGA TTTTCAAGC AGGAGGGCCG ATTGGGCAAC  
 CACAGCTCCC GTGCTCTCTC TTTCAGTGC GCGCTTTCC CTCCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC  
 TGCTGTCCA GCGTCTGCG CGCGTGGTC TTCAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCGN TGGCGGTGAG  
 ACGTGCGGCC GGG

SEQ ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGTA CTGGGATGTC ACTGTTGGAA AGTGCTCACA ATTTCTCATC TAAGCCGAAG TTGTCTGTC TCCTTCTTAC  
 CTTAACAGTT TCTCACTGCC TGAAGGCAGC TGCCAAAACC CCTCTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA  
 CCTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCCT GAGGGAAAGT GGTAGAGTAA AAGAGGGCAT AGAGAGCGCA CTCATGCATT TACAACCTAG AATTTTAAAA  
 AAAGTTTACA TTTGTGCTT TGTACTTCAG ATGAATTTC TTATTAAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT

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CCTGTTTCCC AATGCCTACC CTCCTTCTTC TCCTTTCTTC TTTCTCTTTC CTAGAGAAAT CCTGCCTTCC TTTCCCTTCC  
CAGAGGCAAC TGGCATTATA AT

SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)

GGAAAGAGGA GCAGTCTGG AGGTTTGTGG AACCCAGTCC CCTGCAGAAT CTGTAAAACC TAATAAATCA TGGTTGTGGC  
CATTCTCAGC GTGGTGATTG TAATTAGACG ACCCCCGGGA AGCCCAAGCA CTCGGGGCCT GGAGTTCTTC CCCCTGCCTG  
ACCTAGAAGC AGAACCGTTT TCAGCGNTCT GCGCTGTGG CTTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC  
GGGTTTTATT TCTCTCTTTC TTGAGTG

SEQ ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCTAAA CACTTTCTTC CTGAGATGTT AAGCAAAGTA ATCATCCTGT CACTAGATAG AAGCGATGAA GATAAAGAAA  
AAGCAAGTNC TTTGATCAGT TTACTCAAAC AGGAAGGGAT AGCCACAAGT GACAACTTCA TGCAGGCTTT CCTGAATGTC  
TTGGACCACT GTCCCAAACG GGAGGTTGAC ATCCCTTTGG TGAAATCCTA TTTGACACAG TTTGCAGCTC GTGCCATCAT  
TTCAGAGCTN GGTGAGCATT TCAGAACTAG CTCAACC

SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTTAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCGCAAGGC TATGATCTTT GTNCTGCGCC  
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTGCTGGC AGAGTTCATA CTTTGATAAC TGAACCCTAG  
AGTAAGCCTG CCCTGGGAAA TNCAGCTCA AGGGACTGAC AGGCATAATG CTCTTTGGGA GAGAAATGCC ACATCTGCAG  
CGACACGNAT CCTTAACACT GTCCAGGAC T

SEQ ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTTTNCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GGTTTATAGT AGGTGTGTGT  
TTAGTGTGA TCCCTTTTTG CTCCAATAAT CAAAGTGATA AATATTGAAA ATTGATTGAT GCAGCATTAC TTACTCCATT  
CTAATTTTNA TATAATGCAA AAGTGCCATC TCCCAAACG TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT  
AAGGTTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATCTTAA TGCAATAAC AACTCTTTTG  
GGAAGTAACC CCGTTT

SEQ ID NO:1007: (Length of Sequence = 355 Nucleotides)

GGCAAGAAGG CGTCGGCGGC GCANTGCGGA TCCAGAAGGA CATAAACGGC AGCTTGTTC TCCAGGCTGG TGGGCTTNGT  
GCCCTCGGCC TTGGGATGCT TATCACAGTC CTTTGGGACC AGAACACTGG ATATCAGTNC AGCCTCTGGG CCAGCTTCAG  
AGGCTGTTAG AGCATCATTG CTGCTGTGGC TGATGCTTCC TTTCTCAGT AAATCACAAA AGTCGTGTG GCCATCCAGG  
TTACCGAGTG ACTTAATTTC CAGAAAATTT AATATTGAGG TCATTATTGT ATGCATTTTC ACTGTGCCA TTTTGTATC  
CTCGTAGGTA GGTCTATGAA GTACCACTGG GGTCA

SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTTAAAG AGAGCTTTGG TCAGTAAAAG TATAAANCT GAGCTTTGGT AAGGGTACAG TTTATAAGGC CTAGAGAACA  
TCAAAACATT CATTTCATAT TGAATGTATA AATACCCACA TGTGAGAGCA CATGTTGATT CAGTTTGAGT ATGCTGTCCT  
TGTGNTCTT TAAACCTTT CCAGCCITGG TTATTTTCCC AAGCTTCTT TATAATTACA CCAGGGAAG AGTTACNGG  
NATTAATCAA AACCAGACAG TGGACAATG

SEQ ID NO:1009: (Length of Sequence = 295 Nucleotides)

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GATAGCAGCA ACATACGTTT GTTATTCAT TTGCTTACTT ACAACAAACG TTTATTTCATT ATTTATAATG CAACAAGCAT  
 TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TTTCTTTTCT CAAGGAAATC ACAGTCTGTT GGCAGAGATA  
 AGTAGTAATG GTGCCTAATA TAGGTAACAC TTGCTAOCCTG CTCCAAGAAC AAAGTTAAGC AAGTGATTAA GTTAAGCAAT  
 GCTTAGAGGT AGAGGATGTA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO:1010: (Length of Sequence = 356 Nucleotides)

GTATTTCTCTC ATTTGTGCAA ATNAAATAGA AAAGGTAAAT NAGAACTCA AGAGGTTTGT TACCTACTGT CAATGGAGTG  
 GGGAAAATGG GTGGAAAGAA GAAGGCAATA AGAAAAGAGT AACAGGAAAC GACAGTNGAC ACTTCTGAGT ATACCTTGIG  
 GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAAGAACT CCCCAACTG AAAAGGATAG ACCACTGGAA  
 CAACTTCAAG TGGTCTAATG TAGAAGCAAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAAACATTG  
 AAGAGTTAAC AGCGAAACAC TTTCCAACT TAAAGG

SEQ ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCAGCT GGAGACAGTC AGGAAGGACT  
 GAGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCCTGTGGAA CAGAGAAGTC ATCAACACAC  
 ACAGTTCAA GTCTACCTTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCT GCNAGCTCCC  
 TGTGGCCTC TNCTGCCCCC TGCTGGCTCC CNCTGCGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEQ ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCTA TAGCCCTAGT CAACCACTAA TCTATACCTT GINCTCTATA GATTTGCCIA GTCTAGAAAT TTGTATATAA  
 TGAAATGCAT GCACITGAAC TTTTGTATC TGGCTTGCTT TTCCATTAG CATAAAGTTT TAAAGGTCCN CATATGTTGC  
 TGCATGTGTG CATTCTTTT TGTGNACTGC NATATTACAT TGTATGGGAT ATACCATTTT GCCATATTIN GTTAAATCCA  
 TTCATCCAGT TGGTGGGACA GCAGGTATT TC

SEQ ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTATAGT TTTTCTACAC TACTCTCAAG TTCAITCAGC ATGTCAITTC AACACATGT GACGTGTCAA CTCAAAAAT  
 TAAACAAACC AGCNAAACAC AACACTTGNC ACTACAAAGG AACTTGTTTT ATTCTCAACC TTCTATGATA GCTAAACTTC  
 TCTGNAATTT NGTTCCCCCA CACATCCAC ATCTGGGCTC AATTTCCAGC TTCTGTNTT CTGTTTTATT TCATCCAAA  
 TGTATTTTA AT

SEQ ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGCGCCA CACTTGACAG TTTCAGGCC AGCAGGTCTT GGNCAAGTGC CATTCCACCC  
 GGAACITTTA ACCCAAGCGG TGGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTTCGGG CCATGACACT  
 TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCACG

SEQ ID NO:1015: (Length of Sequence = 222 Nucleotides)

GGNAAGAAAG GTTCTCAGA GGACAGCCTT ATTAATTTCT CAGAGGATGA ATTTGNACAA TGGCAGCAG TTGCAGTCAC  
 AACTTCTTAA GGTGCTTCAG AGGCTGATTG TTCCTAGNAA CACAGAGTAA TGAACATTTC CTGAAGAGCA ATGAAACAGG  
 TTTTGAATTT TTTGTATCT GNACTAGNA ACACATCAGT CCCATCAAC CCATGGACTT CT

SEQ ID NO:1016: (Length of Sequence = 236 Nucleotides)



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GAATAAACTG GTTTGGAACC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGT ACATAGACAC AGGACAATTA ATCAATTG  
 GAAAAAAGAA AGNACTTACT TTCTCCATG CTGCCCTGAAT TGTTTCCCAA TCTGCCCTGA AATGCCACTT TTGGCCAATA  
 TTTTINCAA AATTTGACCA AAAAAGAAAA AGCACTNAAT TTCCCTTTTT ATACAAAAAT GNTTAAGTAG GCAAGT

SEQ ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTTTCCCT AATTTTGAC CTATGTGGAC AAAAAAATA ATCTAGTCCA AGCTTTCCT ACCTTCTTTT  
 TTATTCGCC TTCTGCTTCT GNGTCCACA TGGGAACITG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA  
 ATGAATTINC TGATTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAANGT GTTNAGGAAT  
 GCAGGAGGA AACTAGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTTT ATGAATCAGC TAAAAAATA TGATGACGAC ATTTCCCAT CCGAGGACAA  
 AGACACTGAT TCTACCAAG AGCCTCTGGA TGACCTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC  
 AGCAGCAGC TGCAGCCGCG GCTNCCAGC AGGGCGGCTA CGAGATCCCC GCGCGCTGC GGACGCTCCA CAACCTGGTG  
 ATCCAGTACG NCTCGCAGGG GCGCTACGAG GTAGCTGTGC CCTTINCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC  
 AGGACACGAC CCACCGGAC GTGGCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TTGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG  
 TAACAGCAGA GCAGAGAGTG CAGAAGTGA CGCTCAGAAG CGAGTTTATG TGTGTITTY CCTCTATCTG CTGGCTGTGG  
 CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTGAGATCT GGCAAACTCT CTCTGCACAT  
 AAAACTGTTA TTCTTAGTTC TCTGAAAGAC CCCACATCT TTGAAGTGTA AACTAAGAGC TACATTTTCC CTTTTACTAC  
 ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCT ATTAATGAGC  
 TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCCTG ATGGAGTGAA TGINACCAGT GTGAATTAAA TTINCTTTAT  
 ATATAATAAA TAGCTGTGCT TACACATTTT CAGATTNCT TTGTACGCTA TGGACATGGA ACAGCGGGAC TATGATCTA  
 GAACAGCACT CCATGTAGCT GCTGCAGAGG GTAATACAGG AACTACTCCT ATCTATTTCC TTCCAGATT TAATTTCTAC  
 TTAGTACTAA AATCTGCTCT TTTTTGGGG GTGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC  
 TGC

SEQ ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGTG TGGGGTTTGC TGGGGGCCTC TGTTGGGCCA TGATCTGAGG AGGGTATGTG GGGGGCGGGA  
 GCTCAGCACA TTCCATGGCC TAGAGGGGCC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT  
 KTGGGGAGAT CCCAGGTGG TCTGGGGCCT GGAACCGGCC ATTGKGAGGC CCCAGCAGTT TCAKTGCCCA GGGCCTCCCT  
 GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACACGCC CATGCCATC AAGAAAGGCA GTGTGTCAT  
 GCGTKTGAC ATCAGCAGCA ATGGCTGGG GACCTTCATT CCAGATAAAA GGTTCAGAT GATATCAACG GCTTCTGAA  
 GAGAGACCCG GGCAATAACA TCCATTCANT TGGGAGAGGA GGTGAGGGAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTGCAGGGC  
 TCAGGAGACT GGAAATTTTT NCCAGGAGCT AGGAACGAGG GGTTGGGAGA CGTTGGTCAA AGGGTACAAA GTCCAGTTA  
 TGCAGGATGA ATAAGTTCG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA  
 AATTTGCTAA CAGAAGAGAT CTTAAGTGT CTCATAACAC ACAAACATA GCAACTGTAT GAGGTGATGG GTATATTAA  
 TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTTGGCTGAG TNCAGAGGCT CATACTATA ATCCCANCA  
 TTTTGGGGA GCT

SEQ ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACTTTAAA AGACAGTAGA TATTTGTTGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTCAACT  
 AAATGAATC ATGTAGTATA TCTGATTCA TAGCTTTCTG GGGGAAAAGG GAGGATTGA ATTAGCAGCA GTGCAGGTCA  
 GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC  
 CTGCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAT AGGAATCGTC AAATAGTTCA AATTATCCGG  
 GGGAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTGC AGCAAAGTTG TTGAAGAACC  
 TTCCGTTGGC ACAGATTGTC CTTTTTACA AGCATAACA AGCCTCCTTC CGCCAGGNC TCTTCCGTG CATCCTTGCA  
 AATGGCTCCC ATTTGACACA TTCCTAAGTC TAAGAGATA CCACTAGGGC AGCTTGTA GTCCTTGAAT CCTGGGCCAT  
 TGCACGTCAA ACAACTGATA TCACATTTTT TTGCAGGATT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEQ ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TTTTTCCTT TGCCTGAAGA CTAAACTA AGAAGATTAT TCGAATGGTG AATTAACTTG TTGAAGAGAC  
 TATCCAAAG GGATAGAATG AGACTAATTY CTGACTATGT TTTGCTAGTG ATGGGTGGAT GGAACAAAC ATTACAAGAA  
 ATAGCATAAT GAATGTAGAA AATATTTTCTG TTTGGAGATG TGCATGANIT AGTTTCCTAG GTTTGCCACA ACAAGCATC  
 CCAAAGTGT GGCTTAAAA ACAGAAATTT GTTTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC  
 CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTCTNCCT

SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGTGCAGGTG CATACAGGAA GGACCATGTG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA  
 GGGACCCCAA TCCTGCTGGC ACCTAGGCTT TGANCTTCCA GCCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC  
 CCCAGCAAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA  
 GAGGAAAGAG ACGTCTCAG ATCTGTCTCT NCTGGACATC CGATCCCAGG CTGTCTCTTC AGTGGGNC CA AGTCCAACTA  
 GCAGTCAGCT CAGAAATAAT CCCNAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGGCA CTAGAAGCA GCCAGGAGGG AAGTACTGAC CATTTAAAG TGGCAGATCT CCGGGCCCCA TTTCTGCAGC  
 CTTCACTCTG CAACTCCAGG GAGGGTATTT TTTATTGTG GGTTCAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAAT  
 TTGTGTGTGA AGTAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTG TAAAACCAAT TGGATTTTTT TAAAACAAA  
 GTATTAATAA TCTGGAAGAC AGTNTGCCC AGGTCAGGAG TGTTTTCTG GTGGTTCAG CCCCATCAA TTGAAGTGT  
 TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGG GCTTTCACAC CTGTGGGGA GGGCACAGTT  
 AGGATGTTTT T

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SEQ ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCTCAACT TTCTGTTGGA TTCCATGCTA AGCAAGCTAA CCTTATCCTG CATTGTTAGC ACTAGGCACC  
 CAGCTGCCAC CTCCTCATCC TGCTGCCCTT AGGCCACATG GGAGCAGTCC ATGCATGACA GCCTCTATCC TACAAGGCCT  
 ATGAGTATGG ATTGGGGGGG CCAAAGGAA AAAGCTCCAT GTGCCTCTTT GTCTGCGTGG GTCAGAAGAG TTGTGCACGC  
 AGATTAGCAG GCCAAGGTCT GAGCCACAGC AGCATTTTTA TTTCAGATT TTGATAACTGT TTATATGTGT TGAAACCAAA  
 NTGNCATCTT TTTAAAGCTT ATCCATAAAA AAAATAGAT GTCTTTTATA GTGGGAAAAC ACATGGGGGA AAAAATCATC  
 TATTTTGATG CAGCATTTGA TAATGNTTAA ACACCTCACA CCTCACTCTT

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GAAAAATGCC AATTGGATGC CCTTAGGTGG AGGTGAGAAA ATGGCATCCT TGCCCTCTTC TCAATATGAA ACATTAACTA  
 GTTGACAAAT TTATCCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGCATCATT  
 CAAAATTCTG CTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTTGT TAACCACATT CCAAATGTG  
 GAACATTTCT TTTAGAAATG AAAATATTTT AAGGCTGATG TATTTTAAGN CTACACATTA TCAGGGNCAT ACATTGAGAG  
 TTCGCTTAAT TAAAGGTTGT TGGGCATCAA ATTATGTTTA GTAGGTTACT ATTCTCTAAC AACTCAAGGN TGCTTTAATG  
 G

SEQ ID NO:1030: (Length of Sequence = 340 Nucleotides)

TTCCCGCTTG ATTCCAAGAA CCTCTTCGAT TTTAATTTIN ATTTTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC  
 CATGGAGTCT CGGGTCTTAC TGAGAACATT CTGTTTGANC TTCGGTCTCG GAGCAGTTTG GGGGCTTGGT GTGGACCCCT  
 CCTACAGAT TGACGTCITA ACAGAGTTAG AACTTGGGGA GTCCACGACC GGAGTGGTTC AGGTCCCGGG GCTGCATAAT  
 GGGACGAAAG CCTTTNTCTT TCAAGATACT CCCAGAAGCA TAAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA  
 GCTTGAGAAA TAAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG GNTCCCAAGG GACGGGCTGG CAGCCGGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC  
 TCTCATTAGC AGAATGTGGG CACCTGCACC CAGGGCCCAT ACCACGTCCC TGTGAGCAAA AAAGCTTAAA GTTCTCCCTC  
 CAGGCCCAGG GCCAAGAGCG CCTCACAAG GGTGCTGCC TTGAACTTGG CCTGGGGAAA TNAGACCTTG AGCGGACCAC  
 AGCCCTTGAG CCCTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA  
 GCACAAGAAC TGCAAAATCT GTCTNGNCA GAGCCACCAG AGGCCTTAGG CTTCCTTAGGA CACCGATATC CCCCATTCTAT  
 GGGGTTNGGA GGGAGTGGCT TTTTTAGGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCTACAG AACATAAAT TATACTGAGT TGTGCTGTAC TGGTTTGTA GAACATCAGT GTATTAGGA GAATGGTAGT  
 TTAATTTGAA TATTTAAAGA AAGTAATTTG AATGGTTCTA GTACTAGGGC CATTATTAAAC TAGTAACATA GATTAGTGAC  
 TTCAACTGGG TGTCTTATAT ATCTGATTTG TCTGAAGTGA AACTGTATAA GGTGCTCTTT TAAATGTAT TTGGAAACAC  
 CATAGTTAGG GTAAATNCA TGTACAAT CACTCTTGCA TATTATTINC TTAGCCAAAT TTATGAATTC TAAGTTAGGC  
 CAAATTGAAG GTTTGGAGTT TTACATTGTG GENGAGTCTA AATTCATGCG TTTGGCAAGC ACCAAGGNCA TGGGGAAAGA  
 ATCTGGTATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

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AGTGGCTTAC AAAACACAAA TTTATTATCT TACCAITCTG TGAGTCAAAA TTCCAAAATA GGTGTCACTA GGCTAAAATG  
 AAGGACTGCA TTTTNCCTG CAGGCTCCAG GAGAGATCTA TGTCTTACTC TTTCGGGCTT CTAAAGGCTG CCCACATTCC  
 TCGACTAGTG GCGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTG AGTCTCATG TCACATCTTT MTACCTTTTC  
 TGTATCTCA TCTCGCTGAC TGCTGCTGGG AAAAATCTC CACTTTTAAG GGCTATCATG ATTAGACTAT GCCCACTAGA  
 TAATACAAGA TCTCAGATCC CTTAACCTCC ATCACATCTG CAAAAGTCGC TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CGCGCCGCGA CGGACGCCCT CAACCGGCAA ATCCGCGAGG AGGTGGCGAG TGCACTGAGC AGCTCCTACA GGAATGANTT  
 CAGGGCATGG ACGGACATCA AGCCTGTNAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC  
 ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGGCCAG CAAGCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA  
 AGAWTACGCA GCCTCTACAG CGAACCTTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KTTCAGAGTT TCAAACCAAA

SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTTT TCAGTGGAAA ATAACITTNA TTGAGACCCC ACCAACTGCA AAANCTGTNC CTGGCAITTA GTCCTTCTIN  
 CCTTTGCAAT TCGGTCITTC TTCAGTGGTC CCATGAATGC TTCTCTCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC  
 TTGGAGGTGG TGTCAATGAA CTTAAGGTCA ATCTTCTCCA GAGCCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGGCGAG  
 GGTGAGCACC CGCTTCTTGG TTCCACACAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA  
 AGCCACCCAG AGGGTGTGATG CTCCTGTGAG ATAGGTCATA GTCAGTGGAG GCATT

SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CTCTATGTCT TCTTCTTTTT GCTTCTCCTC AAGTAGAG TGACTTTTTT GAAGGTTAGC TTCCTCTAAG AGTTGCATGC  
 TATTNCTGGC TCTTACAATA GCCTCATATC TCINATTINC TAATTCAITG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT  
 TCCAGATGTG TATTTCGGN TCINAATTGG TTGGCTTCTT GGATTGTAC ACATAATCTT ATTTCTAATT GTTTTATACT  
 AGACTGTAAC TGCTGTAAAC GGCTATCTGA TGCTTCTCT CTTCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTTTATAGC AGTACTTCCC ATTAAAGTGA ATAACCAAAA TCACTTTAAG GTCAAGATCT  
 TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCTTTT GCAACCTTTT AAACCTATGA  
 TGAAAAACAT TAATGTCAGC TCTAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT  
 TTANCAATTA CCCTAACTTG CTGACACAGA NTACTATTAA TAAATAATAC TGATCANNGN AAAGTAATCA ATTTGAAAGT  
 GGTGGGGTA GAAGGACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGNT CCCTTGGGCC CAGGAAGTCA AGGTGTCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC  
 TGGGCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA  
 TAAATGTAAG ATGCCAACAC TAGGGGAAAT AGGATNTGGN GTAAATGGGA ACTCTCTGNA TCATTTTTCG AACTTCTCTG  
 TACATCTTAA ACTATTTTAA ATGNTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGA ACCATGGCCT TCATGATGGA  
 CTTGAGCACC ACCTGCAAAC CTGGGCCAG AACAGGCAG GTCAGGAAGC AACGTGGGCA GGGTAGGGCA AGGAATTTNG

TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGGACAG CAAGGTGCTA AGCAGTNAGT GCTTTCAAGG GCAAAGGTTA  
GAGCTG

SEQ ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGTCAAGA AGAGCTTAAG AAAATATAGG AGATACTACA GCATGTTTGG TTCAATGACCG GAATGATTTA GTAAGAAGGA  
AAAGCCAATA ATGTAAGAAA GGGGATTGCA GGAGCAAAGA CTTTAAGGAA TAAAAAGGNC AAAATGTGTT GTTTCACAGG  
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCAG CTTTATAGCTT CAGNTCTGCC TGACATTAT TGGTCATGTG  
GCTCTGGGTG TATCTCACT TCTCTCCCT AAATAGCAAG AAGGAAAAGC CTTTGGAGC CTCGTGCTC TGCTTCTTTC  
TGTACAATGG TTATGTTTCT GNTCCGCTTA GCTGGTAAAT TATAGAATCA CCCINGCTGG GGTCTTTTGG GGAATGGCC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAAACAG TCCGTCACTG ACAAATGTTG TTAAGCAGCA CATTTTATGC AGTGTGTGAC CATAACGAT ACACAGAGGA  
AATTCAGGSC TTCTAGGAAA CCTTCTAAGG CCTCATCTCC CTAAGGGCAC CTGATGAGCC ATTCTCACC CCTGCCTGTC  
ACCAGGNTCT CAACACCACC ACCAAGGCTA ACCGCTGTGC ACTCTGGGCC CTGGGTCTGC AGTACCTGGC TCCAAGCAC  
ACCAGCATCT GAAACCTG N CATCCTTGCC GATNTTNCGG GGAGTATGG TTGATTGCAG TGACAAATCG GCAGAAGTTC  
CGGG

SEQ ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTTCT CAGAGATGAC ACTGCCAACA ATCAGAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTAC  
AGTAGTGTTT TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TNGGTTACTG CCATTGCGN TTTTTTACAT  
GGNCTTAGCT TAAAGAACTG GTCTTTAGCA AATATTCAAC AGNTCAACCT GA

SEQ ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTTGGAGAA AGAAAAATTA GAGAATTCCA GATCCTTAGA ATGCAGATCA GATCCAGAAT CTCTATCAA AAAACAAGT  
TTATCTCTTA CTCTAAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCTGAGGCA  
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTTTAAATC ATGCAGATCA TTTCATCAA ANTAGTNCAG CAGCAAGATG  
AAGAGCGACG TCGGCAGCTG AGAGAGAGAG CTCGTGACCT AATAGCAGAN GCTCGATCTG GAGTNAAGAT NTCAGAACTT  
CCCAGCTAT

SEQ ID NO:1044: (Length of Sequence = 285 Nucleotides)

GTTGAAGCTG TTTTATTTT ACACCTTCT GTTTTAAAC ATAGGGACTG ACAGGGAGAC CCAGGGCTGC AATCTGGGTG  
GTGCTACATT TGTAGACAAG GACAACTTC TGTATTTTAA CCCAGAAACA TTAGAAAGTT TGCTCTGAA CTCTGGCTC  
AGATTAGAT GCATCTTTGA AGTGCTGATA TTTGGCTTAT CTGAAGCTTT GGGATTATCA TTTCATAGT ATGAAGGGAA  
TGAAAGTGT CATAACATTT TTGCAGGTGG AAGGTAAAGT TGTG

SEQ ID NO:1045: (Length of Sequence = 317 Nucleotides)

TCGGTTACTG TAGTATTGTA GTATAGTTTG AAGTCAGCTA GGTGATGCC TCCAGCTTG TNCITTTTGC TCAGGATTGT  
CTTGGCTATA CAAGGTCTTC TTTGATCCA TATGAAATTT AAGTAGTTT TTNCIAATTC TGTGAAGAA GTCAATGGTA  
GTTTCATGGG TATAGTATTG AATCTATAAA TATTTTGGG CAGTACGGNC ATTTTCATGA TATTGATTCT NCTATCCAT  
GATGATGGAA TCTTTTCCA TTTGTTTGGG NCTCTCTTA TTTCCTTGAG CAGTGGGTTT GTAGTCTTG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotides)

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CCAGGTGCAA TCTCGGCTCA CTGCGAGCTC TGCTCGCGG TAGTGGGACT CCAGCTGTGC ACCACCCAGT CAGCCCCACG  
 CCCACCTGCG CAGGCGTGTG CACGGTTCAG CGTCACITTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC  
 CTGACACAGG CCAGGGCAGG GNCACCCCTC ATGGGCTGTG CTGCAGCCTC TGCTCGTGG GTCACGGCAC CCCATCTACG  
 AGGNGCCCT CAAGGATGCG CGTCCAGTN CCCGGGCCCC TTGGCATGTN CCTGGCAGAG AAGGCAGCTC AGGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCTCAAA CTCGGGTTC AGCTGGGTCT CAAACTCAGG CTCCAACCTG GTCTCAAACCT CGGGCTCCAC CTGGGTCCA  
 AACTCGGGCT CCACCTGGT CCCAACTCT GTCACCACCT CTTTNTAGGT CTCANTCTCC GACTCTCTCC AGCCAGCGGT  
 GGTGGCGGT ATNAGGCCCC AGGGCTCTAT GGTAGTCTC AGGGTGTGTG GCAGGGGCAG GGGGCAGCGT GGGAGGCACA  
 GTGTNGGGG CCTAGGGTGG T

SEQ ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAAG AGAATGGAGG CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA  
 CACCTCTGA TTCACAGTTC AGTATTTTCG GCCACITTA TCAAATATTT TTATAAATTA TTTTAAATC GGCAAAATAT  
 TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TINGGGGAAA ATATCTTAAT  
 TTTTAAAC AGAAAAAGCT AGGNNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA  
 ATAGGGTTGA TTCAACTATT ACCTTCTCT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEQ ID NO:1049: (Length of Sequence = 335 Nucleotides)

AAACTCACAA GTAAATAAT GCATATTTAA GGGAAATATT ATACAGACTT TTTCACACAG AAGTACATAA TANGATTTTT  
 TAAATCTAT TGCCATTCT TATTTTTCG ACAAACCGT ATAAATATGT CACCAGCTTT NCTTAACCTA AAAAACTTAA  
 ATAAAGACA CCAGATGAAA ACTACCTTT GCTGCCATTT TTTTAAAGT TTTTGTAG GGGTTTTTAA TTTTGGGT  
 TTTTTCNTT TTNTGCTTA GAATTTGGTT TCTAGGAAG AAAAGCCCT GCATTAAAA CAGNCCATTT AAAAAAAAAA  
 TTCAAAGTTC TGGAT

SEQ ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGGAAAATA TGCAAGATAA ATTAAATNCT TAGTTAAAAA AAAAAAAG TTTACCAAC  
 TGNTCTCAT TACTGAGAAG CCCCACACT GCCCCCTGT GCATATTCCT AGTATTTCT CCATGTCCTG CTCGTCTGTG  
 CTGCCTACA AAAAAACCT CCCGGGGGG AAAAAAANC AAAAAACGG TGTAGTGGA ACTGCTGAAG AACTTAAATG  
 TTCAAGNGCA TCTTTAAAGT CTAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTTCTAAAA TGCTCTCAA TACTAATATT ATACATTCTC CCATTATCC TCAAAAAACC CATGAGACTG GTGATGTAAT  
 TNCGTGTTT ATTTACAGC TGTGGCAGT AGTCTAAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA  
 GAGCTAAGG TTAAACCCAG AATTTAAAA TTTTNTNAG CTTCTNGTTT TTNCCATTAT ACCAGTTTGG CCTTCATTT  
 TATTCATGG TTAAATTAAT TTATGGTAAC AAAGGGCCCC TGGTCACTTT GGACATTT

SEQ ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGCAAACG TGGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAAT GAGAATTCTG TCCAGAATTG  
 GTTCTTCCG GTGGGTCTT GGTCTCGCT ACTTCAAAAA TGAAAGCCAT GAACCCCTCGT GGTGAGTGT AACAGTTCTT  
 TCAAAGATGG TGTGTCGGA GTTNTTCC TNCAGAATG TTCCAAATGT TATCCCAAGT TTCTTCCCTT CTGGTGGGT

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CGTGGTCTTG CCTGATINTC AGGAGTGGGA GCOGCAGAAC CTTTGCCCTGT GAAGTGTAA CAGNNTCTTT AAAAGGTGGG  
TGGCATCTGG GAGTTTGTTT CATTCTCTCC CCAGTGGGG

SEQ ID NO:1053: (Length of Sequence = 195 Nucleotides)

GTTCGAAAT TGTATTCCCA GTGTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGNAAGGTGG ATCCCTCATG  
AAATAGATTA ATGGCCCTCC CTTCCAGGGT AAGTGNAAIT NCTCAGCTG TTAAGTCCC ACTGCAAGAA GTTGGTTGAC  
CAAAAAGAAG CCNCGTGCCT CCCCTAACC CTGA

SEQ ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGTTCTCAC AAGAGCCCCT GCTTCAGAT CACTTACATA GTTTTGGGG AAGCCAAGAT CGAAGATTTA  
TCCAGCAAG TCACAAC TAGCTGCTGC AGAAATCAA AGTCAAGGT GCAAGCTGTC TCAAACATTG CAAGCAAAAC  
ACACAGTACT TCCAACGTGT ACAAGAGGAG GAGTGCAAGA GGAAGAGGT CGCTGAAACA GGTGTTAGTA AGTTNAAGGT  
ACATAGANTT GGTTCATGTT CACAAGCAA TGTGTTGAG GGNCAAAGN CAGTCCGAG CCTGTAACT AACACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAAA GAATCAATGA AACAAAAAT TAATTTTGT AAAAATAAA ATTGATAGCA  
CTAGCTAGAC TAACCAGCAA AAAAGNTAG CAAGTACCTA AATGAAAANC TGNAATGNA AAAAGGAGGA CATTACAAA  
TNAACACAGG AAATACAAA GTTCCATGCA GCGAACTTAT TCAG

SEQ ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAATTAA TGATTTCTGC TTCACCAGAT TGGTAGAATG TATAAGATGG TGCATGGGA AGCATTTAAT ACCCAACAAT  
ATCTGATTAC ATTGAAATCA CAATGGCTC CTTATCAAT VAGTAGCGT ACTGTTGAG CTGVAAAAC TTTGAAAATA  
ACTTG

SEQ ID NO:1057: (Length of Sequence = 203 Nucleotides)

CTTTCATTCA AAACCATCA CAGAAATGA CAGCTTGGGT CTGTACAAA GCATTCATGT TTTAGAGCAT AGGTCACTAA  
TTGTATATGA GAGCATACAC TGGCTACATA CAAATTAAT GTTCAGNCC ACACTTTTIN CAATGTTTAA AACAGGATNA  
AGCCTTCCCT GTGAAAAGCA GCACCTTGT GAACGGTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGTGCAATAT GCACATTACT AAGCACAAA AACAAGTGA ATTGAGAACT ACTTGCAATT TTTTGTAGTA AATGCCAATG  
AATTATTATG CTTAGTTTT ATGAACCTGN CINTCCTTG TGCAATCCT TCCTTGCAA TGAATTGACT TNAACGCCGT  
NAGTGAATAG CTCAGNCTG TAGGATGTCC TTTCAAATTT T

SEQ ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCACACTGGC TACATACATG TTTTCAAAT TAAGTTTTCT GATGGCTCAT CATTGCCAT CTCTTCAAAT CCAGGTCTT  
TTAAAAATCT ATGACCTTGG AATGAATGTG CCAGAATACC TGTATCTGG AAGTCCATGC GAATNTTGGC NTCGACTGCC  
ATCCGCCATC TGCTGG

SEQ ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAAGCA GTGTACAGT ATTACAGTCA GCCACAGAAG CTGTGTGGG GGACAAGACC CAATCCTTCC CCACACCAGG  
CAAAGCAGTA TTGGACATGA GTTGGCATGT GGCTGGGCC ACGTCTTAT CCCCAGGNC CTGNGGGGAG ACCACCTTTC

TGAATGGTAA ACCAACCCCT AGGCTACCAC TCTGTATTTC ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA  
ACCCCTTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEQ ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTA CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA  
TCAGCGTACA GCAAAGTGGG TGTTCCTATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG  
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTGAG

SEQ ID NO:1062: (Length of Sequence = 316 Nucleotides)

TINCCCTCAC AGAGTTTTAG TTAGAATCAC TTTCTCTATT TCCACAAATC CTTCITTTCT TTCCTTTTAT TTTCTAAAGT  
GAATGTCCAA GCAAAAAGGA AGCAAAAATG GTCAAAGATC TCTCTTACAA TATAGTAATA AATTATNCA AACAACTTGG  
AATTCACCTT GTGCATTGAA AATNCAACTC CACACTGCAA ATTATGGCAT TTTTCCCN C TCAAAGGAAT TAGTGAAGTC  
CATTGGATGC ATTCATACIN CTGTTTAGN AATAAGGGAA ACCGCTTTGT AAAAGTNCAT CATGGCCTAG GAGTTA

SEQ ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG  
AGTATCCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGGC CTTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC  
TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGNGG ...ACAGCCT ATTAATACCC AGCACTTINT GGAGGTGCAG  
GGAGTTNCGA GTACCAGTCC TGGGCCAACA CGCNTGGAAA TCCTGTGAA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length of Sequence = 322 Nucleotides)

GAAAGCATTT GAAGTAAGIN TGTAATAATG GCAGATAATA ATTAACACTT GGTAGCAAGA AACGCTTTCT GAAATACTGG  
GAACACTGAC TTGTTTCACT GTAACCTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATGCAACT TTATATCCAA  
CATGGGTGTT CCATTTCTAT TTGGATAAAA TTTACTGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAAG  
GCTCTGGCAC TAAATTCACT GCTACTTAAC TTAGTTTACT AATTAACCTC CTTAATTATA GTTTTCCAAA TCCGCATGCA  
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTGNCAAC TCCTTGCAATG GACTGATGCT GGAAACTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTTAGC  
AGGCTCACCA CAAGTTCTAA AGGGCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTTINCTG  
GGATCCTGAC TGTCCCAGGT TACAAGTTCC TGGCCACTCT GTGAACCTTG GGCAAGTTAA CTTCCAACCT CTTTACAAGT  
TCCCTAATCT ATNAGGAAAC ANTTAGTAC ATGACCTTCA TGGGAATTTA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTGAGAGCA GCCAGCTCCT CCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCAAT CCTGGAGAT  
AGGCTCTGAA ACCAGGATAG AGACTCCTC AATGGCTGCT GNTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCTGNG  
TGGGCATAGG TGGGCCTGGG AATCTAGGGC ACAGCAATTC CACACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCT  
GCATGGTTTC ATGCTGTGAA ATCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAATGCAAT TGGTTTGTA CTGAGTACTA TTCGTGGGAA GACAGCATCC TGNACTCCCT CTCTACAGAA TATTGGGAGT  
AAAAATGAAT GTCATCCCCG GTGGGAAATA TTATTGGGGG TTGAAGCAC AGAGCACAGG AAAAATTAAG TNCAGGAAAC



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AGACACTAAG AGTGCCTGG GCAGGTCTGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEQ ID NO:1068: (Length of Sequence = 412 Nucleotides)

TGGCCAGCAT CTGGGAACCT TGGGTGTGTG GACCAACTTC TTCCAACACG TGCGCACTGA TGCCCGGGGC CCCAGCCAGG  
 CCTGNCCTGA AGGGTCTTCC CCGNCCCGAG GGACTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA  
 TNCAGNCAG CCCATTGACC CATTTNAGGG GACAGCTGGA GGAAGCCCG GAGTCCCTTG TTTCTTCAGC TGAG

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TGCTCATGA AGATAATTTA ATGCTAGACT GATTTCTGCA GAGTAAATC TGGCATGTNC TTCAGGAAGT TTTCTTTGTC  
 GCTGCATATG AAACATTAGG TCTCTCCAT TTACATACTC TATAACAAAG AACAATCTGC TTTCTGTCTG AAAGCAAGAA  
 TGACGCCTAA CAAGGAAAGG ATGATTGGAT GCTGCTCAA ACACATGCTT CTCTGTCTGT ACCCAATCAA TATCCTCATC  
 ATCATTAAAC AGCTCTTTT TCACAACCTT CATTGCATAA ATACGATCTG TTTTTTTTAA TCGAACCAAC AGTACTTTGG  
 CATAACTTCC TCTTCTTATT ACCCGGAGCA AATCAAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG  
 NGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

GTGATTGTNC CACTGCACTC CAGGTTGGGT AATGCAGCGA GACTGCGTCT CAAAAAATAA ATAAATATAA AAAAAAAAAA  
 AAAAAAAAAA AAAAAAAAAA CACCACCGCA CTCCAGCCTG GGCAATAGAG TGAGAACCTG TTTTCCAAAA AGAAAAATNT  
 TAAAGANTG ATCTNGGCCA GCGGTGGAGG CTCATGCTTG NAATCCAGC ACTTTGGGNG GCCAAGACA GGTGGTTCAC  
 TTGAGNCAG GAGTTCGAGA CCAGCCTGGC CAACATAGCA AAACCCCAT CTNCTACTAA ATTACAAAAA GTTAAGTGGG  
 CATGGTGGTA CATGCCCTNG TAATCCAGT TACTTCCG

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATGA ATCTCGCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT  
 CCTCATAGC ATTTAAATCT CTCCACTTG ATTAATAAT CCTAGTTCCT CTTCAGTGA TGTTTAGAG TTTTINAGCA  
 GCCTCTGCCC TGATTAAAC AAATTAGCAT CAAAGATCCC CTGTGAATG AGAAATCATT AATTGAGAAA CATGCAATGC  
 TCCTTAATTA CTTTTAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCCAG AGGGCCCTGC CTGCTCTGCA CCGTGAACCTC  
 ATTTGCTGTA GCTGCTGGAA TAAACTCAA GTAGGCAAC ACTATTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA  
 CTGTAGGATT G

SEQ ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCCATTTT ATAATTATG GAACATGAAA CTGTATTCT ATGAATCAA TGATTTTTT CCATAAAAT ATATGCTAAG  
 AGAGTCACCA CAAACTATG AATTCTCTCC CGAATTATTT TGCTTCTTT GGAGCACCAT AGTCTTTGTT CAAATCACA  
 CATGAACTG TTGCTGCAAT GCTAAAGATG TGAATCCACC ACTATCAATA CGGTGAGGT AAAACCTGGA GCCACATGTT  
 ATTCAAGTTA TTTTGTAT CTAATGATT ACATGAAAT AAAATAGTAA GCCAATATTA AATTGTAGG CATAGTTGCC  
 CCACCTNAAA AGTGTTTACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTTTTCTGTC CTGGCTAGGA TAATGCAAGC NCTTTTCAGA TGANTCAGAA TCGAAGAAA TACGCTGGTA AAACAGGACC  
 TGATTTACCA GGNACTAAAC AATTACACTC CCATTTCCAT TGCTTTCAAT ATTTTCACAC GNTACAGGA CCTTTAAGAT  
 GGAAAGGGAA AGCGATTTT TTTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

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SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GGTTAAATTC TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA  
ATACATGCCT TCCCTTTGGG GGATGGGCCT GGTTAATCTC CAAATGGGCC GTTTGGAACA ACTCATCATT ACTGTACAAA  
GAAGGTACCA CTTGGTGGGA ACTTTCACCT TTTAACAAAA CTGGTTCATA TTTCTCACCT GCATAGGAAA TGGTCAAACC  
TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAACTG GTACAGATGT AGAGTGCAGC ATGTTTTCAC  
TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAAT TATCAACTT

SEQ ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAGTTGA CAGTCCAATC AGAAATATTT AAACAAAGTT TCCTACTTAA AACACCATCT AAATATACCT TTTGTATAT  
TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TTTTCCCCCT AAAAGGCAGT TTAGATGTNC  
TCATTCTAGG NTITCCATCT CTCTCTCCA CCATTCCAAT TCCCAGAGTA CCTCTACAAA TATCCCTGCT TACCAGTAGA  
NCTATTTGCT TTAACAATCT TTCTGTGGGT AAGGAGATGC ATATGCCAAT GTGAAACTA TGGAGGGGGA CTCCTGCCTT  
CAAAGGCTGA CTAGAAACCA TTGGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTTGA GATGGAGTCT CGCTCTGNG CCCAGTGTGG AGTGCAGTGG CATGATCTCG GCTCACTGCA AGCNCGCCCT  
CCTGGGTTCA TGCCATTNTC CTGCCTCACC CTCCCGAGTA GCTTGGACTA CAGGCGCCTG CNACCACGCC CAGCTAATTT  
NTTNTGTGTG TGTTTTTGGC AGAGACAGGG TTTCACCATG TTGGCCAGAA TGGTCTCTAT CTCTGACCT CGTGATCCAC  
CCGCTTGGC CTCCCAAGGT GGTGGGATTA CAGCGGTAAA TMACCG

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGT CACATTTTAC CCATGAAACC TTTCTAAAT ACCTTTTGCA TTNTTGCCT ATCCTTCTAC ATCATCATA  
TTCTCAATT AAGTCACCT TTTTGGGTAA CATTTAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA  
TTATGATGTT GTCATTGCTT ACACATGGG AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG  
AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCATTTTAC CCTCTAGGAN CCAATGGAC TNGGAAGGAA GTAGAAGATG  
GGGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATTT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTTTAAGTGC GAAGATTTTA TTAGGCGGTA CAATTCGAAG GTGGTAAGGG TGAAAGGAAA GCGGAAGGCA GGCAAATACA  
TTATTGAGCT GAAAACAAC TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCTT GGGACTGTNT  
GGATGGCAGG GAGACGAGTT TCTATGCTGA CCATTCATG CTTCCTSCCC CCTTTGGGGA AAGTATGCCT CACGACCTC  
TAACTCTCCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATCTGTTC CTTCAAATTT  
YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGTCT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CTTAAGTTAC TGAAATTGAA ACACCCCTTG TCCTTCTCGG CGGGGGCTTC CTGGTCTGTN CTTTACTTGG CTTTTTCTCT  
TCCCGTCTTA GCCTCACCCC CTTGTCAACC AGATTGAGTT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCGGTT  
AAAGATTGGG AGTCGTGAA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCT TTTACAGGGT AGTAACTTCT  
CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATTA CATAAGGAAC ATTGAAGTGT  
TAGAGGAGTG CTCTTCCAAA CAAAACAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT  
TNAATCAGG GTAACCCCTT TCTGTATTG AGTGCAGT

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SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAACTCCC TGAAATAGG AAGTCTCAAT TAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC  
TCTCAGTCCT TGGGATGGTT TTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC  
ACATTCCAAT GTTACCTGGN ATTAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG  
CAATGGAAAT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AAAC TAGCCT TAAAACTGG  
TACATAATGG TTCTGGGTT CANTGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTTAAATGGG  
ACCTTAAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGTTTAA ACCAAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAACTCTG AGTGTGCCTT  
TAGGGTCTTA CTTCCTAGTG ACCCTGTGCA GGAGGGCGG GATGAGTTTC CAGAGCATAG AACTCCTTCA GCAAGCATAC  
TTGAGGAACC ACTGACAGAG CAAATCATG CTGACTGCTT AGATTGAGCT GGGCCACGGT TAAACGTTT TATATAATCC  
AGTGCCAGCA TTGGTGACAT GGAAAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCAGCTGT  
GCGGTCAGAG AAGAAACGCC TTAGGNAGCC AAGCAAAGTG GCTTTTGGA TATACAGAAG AATATGATCA GATATTTGCT  
CCCTAAGGAA A

SEQ ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTINC AAGTTCTCTA GGATGTTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT  
AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTCT GTACTTCAAG  
TTTCACGGCA CATCTGATAG CTGTNCCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTTGAAGGT TTGNTAAGN  
TTTGCTTGA GCGACTTTAA CAGGTTTATT TCAAAGTAAT TTGTGTTGT AGCCCACTA AAGTAATTT GGGCCAGNAA  
AGGTTCAAAA TACGGTTTTC CCTACTTAAG

SEQ ID NO:1083: (Length of Sequence = 430 Nucleotides)

GTGAAGTCCA CTGCTTATG GACAGCCCAT TTGCATGGG CCCTGCGTGT GTGCAGCCC AGGGTATGTA AGGAAGGCCT  
CANAGGAGCT GCTGCTGCCA CAGGTGGTCA CCAGGCAGA GGTTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT  
GGACAGGGGC AAGTACATA CCGCTGTTT ACCATGGGT CACGCAGAA CCTGTNTAC GGGTGCTTT GTGATGCCAA  
ATGGATATAG GTGGGACGTG CTGGCAGCAG CGCCTCAGC GTCAGCCAT CTCCCTCCC GTTCTGCTCC GGCTGCCTG  
TGGGCCTAAT GGTGGCACCG TTTAAGCANC TGCTGTGTG TCAGCCTGG GNGTGGGG TTTCCATACA TGATCACTGG  
TTCTACCCA AGGCCTAAT TCTTNCCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGAAGAA GTGAAAAGA ACAACACAAA GAAAATAAAG AAGTAACCTC TTTACCCAC TGAAATAATC TCTGGAAAAG  
ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NTAAATTTT TTTCAACAC  
ATAAAATACA ACATGGGAAA TAAGATGTTT TTTACTAACA GGCAAACT TGAGNGTCC TCTTCAAAGA CTACAGTGA  
TGAAAGACCA GTTATCCAAA GGAAACGGT AGTAGAAATA TAAAGTTAGT CCCACACAAA ATTAAATGG TGCTCAATGC  
AGATTATCTA TCATTANACC ATTTTAAAG GCAATTNTT ATTTAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCTTINA GCTGGCATAA TTAAAGTTC TAATTATCCC TTAATCATAA GCTGTACGAT TCTATAATTA AAAAGTTAAT  
GCCTTCTTAA TGCTATNCT AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTTT TGGTCTCTAC TCATTTTGCC

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TTCTGATTAT ATTACAACTC CAGCTGGTGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCAITTCAT TTTAGCTTCT  
 CATTGAAAGG TAGATATTCA GTATGAATTG TAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACIT GATCTGAGAA  
 TTACTTGCTG GTGCATTTC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTT GGAGGTGGAT  
 AAGGAGGGCA GCT

SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

TGGATAGCAT GAGGCAAATT GCCAGAAGAG AATTTCTTTC GCATCCTAGT AGAATAAATC CAAATTATCT TTGTGGTACT  
 GAGGATGTCT GGTITAGCAC AGTGTAAGT TGTAACACTT TAACAGGCTA TTAATTCACA GTCACTAATT CAATGCTTGC  
 CCGGAGTTTT GCTAGAAAAG GATGAGAAGG ATTAAGGTAA AAAAAAAAAA NAAAAAAAAA AAGATAAGGT TAACCAGATA  
 CATCTTAAGA GCTGATTGCT CTTCAITCCC TAACTCG

SEQ ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT TTTTTTTGAG ACAITGTCTC ACTGCGTCGC CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCACTGCAA  
 CCTCTAAATC CCAGGTTCAA GCGATCCTCT CACCTCAGCC TCCGGAGGGC NIGGGATTAC AGGTGTGAGC CACCGCGCCC  
 GGCAGCATT TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA  
 GTTTTAAAG TTTATTTCCC TATTGATGGC ATTTAATTC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT  
 TTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

SEQ ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT  
 TTCCAGCAG CGGAAGTGAA GGAAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTNTCTCCC  
 NINCTACCCT GGAAANATAA GTGTCAGGTT CATACTTAAC CACCCCTT

SEQ ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTTGCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA  
 AACATGAAG AATCAATGAG TGCCGGAAT AAACAGGATA GGTGGCAGCA TAGCATGCC TTAAGANCAAT GGCTGTGGAT  
 TCAAATCCCA GACCAATCAC TGANTTTCAA GCCACTTTC CTCTCTGAGC CTCTGTTTC TCATCTGTCA AGTGGCAATA  
 ACAATAAATG GTACGTGCCT CATAGGGGCA CCTTGAGGAT TAAAAGAGAG GGTTTCAATA AATCAAGTAC TGATTTCAA  
 ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTTNTGGGC CAGCAGCGGC TGGGGCTCAT CCTCCCTGG  
 CTGGGTCCA

SEQ ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCTNTCC CCATTGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC ATTCAGCATA TGTAAGGAGA GGATGAGGCC  
 CGTNAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGAACT  
 GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACCT CTGGAGGAGG  
 AACCTATGGA TTTTGTTC CAAGTTTACA GAATTTAATG CTCGAAAAC GCATAAGTTA TNCAGATGG CTCATAAGNA  
 AAGGTCTCAA GAAGAAG

SEQ ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACTACCAC AGGAAATCTC TATACCCTTC TTGGCTTTTC CTTTTAATGT AATTTCTTA AAAGCTTCAA GATAATTTTT  
 AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAATGT TTCTNCTGTT  
 GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

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TAAATACAAA CACGGGATAT ATTINGTCAT AGAAAAAAT GTGTACTGTC ATTATTTTGC ACTTCTGAAG GACTGCAAAC  
 ATTTTTCAG CACAATAAGC AAATTCTTCT TTCAAAAAGG NATACTTTNG CACATATGTN AGGTTTGGAA AATGACTAGG  
 NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTINCCAC TGGTGTGCA ATTGCTCAAA TATTTTNAGG ATGAATATCC  
 TCACCTTGA GCAAGTTT TAAGAGTGAA TTGAATTAC TGGAGCAGTG AACAAATTATT TAGAGTCTGG TATAAGTGAA  
 GAAAAGAATC ATGACNGTA AGCTGTCTTG NAGGTACCAG CAAACTGCTT CTAAAATTTA TATGGAAAGG CAAAGGGGTT  
 AGAATAGCCA ACATAATACT GNAGAAGTGA GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC  
 AAGGCAATGT GGCACGTGGT AAAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTTGTT TTACATCTG GATTTTCCIT TTACTTTCC TAATGATGTA ATTTAACINC TTCCGTGATT TNCCATATTT  
 CCTATAAAT GGTAGTTAGA TCTAAAAGCT TGATTTACTT ATTTTCAGATT TCTAGTCAAG GGTACTCAAT AGATTGTATT  
 TCCTTTTGCC TCACACGGAG GTGCATAATG TCTGCCGCGC CTGTAGTGAT GCTAAGGTTG ATCATCTCTG TCAGGTGGCA  
 TCAGTCTGTG ATAACCTCCT GTAAGATCG TTCATTAAAC TTTCATCTAA TGGNTCCATT CATTCATGAT CTTTAACTGA  
 ATCCCTGTTA TTTCATTAGG GAATAGCAAA ATAATGATTT TCTAATCTG TNATTCTTTT CACATTTATT AACGTGTAAT

SEQ ID NO:1094: (Length of Sequence = 414 Nucleotides)

GTCAGTNTC CATAACTGTT TCCTGCTGAC AAAGGGGCG TGGTGTGGT TCTNTGGGTC TTGGCCTCTT GCTAGCTGTC  
 ACAGCAGGAG GGTGGCTTTN TGGATTGGTG AAAGTGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGCGAG GTTTTNCCTA  
 TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATTG TCCCAAGAGT CCCCCAGTGC AAACCCGAGC  
 TGAACGCCAT TTAGTTATAT NCTGGTGGT TTTCCTTCTG CAGGAACTCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG  
 GGGGCCAGAG TGACAACCTG TAGAAAATA TGTATTCCG CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG  
 AGTCAAGTTT ACAA

SEQ ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGT AAATAGTCAT ATGAATCCTT CAGAATGGAT AACACAGCTT TNCTGACTGG TGTGAAATAG  
 TTTTCAGGTG CTCATCTTTT ACTTCATTAG CTATCTTAT ATCATTAGCT TATCCTCCAT TCAGGTATAA CAGATCTTTT  
 TTTTCTGATA AATATGGCAG TTTAGGGAAA TAACTATGG CATAATATGC TAGGCCATTG TTCTAGGCCA CGCTTCTTTG  
 ATTGTAACCT TAAACCTTTT ATCAGAACCT AAACAACCTT TCAAAAGATC TATACATATT TNATCCAAT GTTTAAGGCT  
 ATGAGTAATT CATTATGGTC ACTCTTCATT TTNTCACCT GATAATGATC TCGNCAAAAA TGTTGAG

SEQ ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACTTAAAGC TTTAGAATGA TTGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA  
 CATCATAGGT TTGGATAGCT AGTTTAGGAG TAAGTGAAAC ATTTTAGAAG AGCATTTATG TTAACCTTGA CAATAGGATG  
 GGAGATTCTT AACCCCTTTT GTAATATGCA CCGATTGATT CTNAGTTAAA ATACACCACA GTGACAGTGA TATCATCCTT  
 GTACATCTC GCCAAGTCT CTGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCCATAC TCATTGTCTC  
 CGATGGCATG TCTGATCAGC CGCGTGGCTG CATTTTGGTC AGCCTCGTGG AGCCCGCTGG CTTTCTCTG CAGCAGCAGG  
 CTCTGCAATG AGNCCC

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SEQ ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCCTC CCGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC  
ATTTTGGGCT AAATAGTTTC TGTCCACAGG ACCGTCITGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC  
CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTACAGTG CCTGGCATCT GTCTCAGGGT  
AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTTGAGA AACTTTCTAC TATGGTATGC  
TCATCATCTT CTGAAGATGT CAGGGCCTGT TTGTTTGTIT GCCGTGTTCT CTCACTTTTG CCTTATAATC AGTTCTTCCT  
TGTTGG

SEQ ID NO:1098: (Length of Sequence = 326 Nucleotides)

GGCCCGCCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA  
AGTTATGATG TGATGAGTTT TGGTGTAAAG TTTTCCCTC CTCTACCTAA AACCCCTCAT GCCTTCCCAT TGCTCTTAGA  
AAACACTCCC CAATCTGAAA CATGACCATT TTTGTTTTN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCTC  
CAAGCTGGTG CTGGTGTCTT TCCGNCATNC CCCTATTAGT TTTTGAGCAC CTGGACCACT AAGGTGTTCA GTCTCACTTT  
GCACTT

SEQ ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAAAACGAAC AAGTTTCAGC AGTCTAGCCT TTGGATGACC TATTTGAAAA CCACTGAAAG TCGTGGAGGA ATGGGCAAGA  
ACCACCTCAT GATTCINCAG GCCATGTCTA ACGAACAGCT CATTGCTACA ACCAGTCCAG AGGTTTTATT CCCTCTACTC  
CGAGCAATGA AATAGACCTG AGTTATGCTT CCTTTCATTT AATTTCTGCA GATAAATAGT TTCCTGAGCA ATGGATGCTA  
TGCTTGATA CCACTCTCCA CTTTGACGCG CGGAAGTCC TTGGGNCAC AGTTACAGAA AAAATGTAAA CTCAGAGTGA  
TCCTTGTTGA TATTGCTATA GA

SEQ ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATCGCTTGAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG  
TCAGGTATGG TGGCGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGAAGTAGA  
GGCAGAGTGA GCCATCATTT GTTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAAA AATTAAATAG  
AAAGTCTTCT TTTTITAAAA TNCITCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAACTT AGTGAAGAAG ACATGTCAAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT  
ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC  
AGTTTTAATA TTCTGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC  
TCTTCAATTC TTACGANGGC TGAGAGAGGT AAGGAAGTTG CAGAAAAGTT TTGAAGTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCCTGGC TAACACGGTG AAACCCCTC TCTACTAAAA ATCCAAAAAA ATTAGCCGGG CGTTGCGGCT  
GGCGCTTGTN GTCCAGNTA CTCCGAGGC TGAGGAGGA GAATAGGTG AACCTGNGN GGCGGGNTTG CAGTGAAGCC  
GAGATCGGGC CACT

SEQ ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGTCTT GCTATGTTGC CCAAGCTTGT CTCAAATCC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGTT  
CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGTT CTGTGTCCGA GGAAAACCAAG

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GAGTIGATTGG TCACTCTATT TATGACTCAT AGCACTTACA GGCTACTTCG GCAGGGACTT NGGGTACCCC TGTTCTTGGA  
 TGGCACAATCA TTATCAGCAA CAGGAACAGT TTCTCTGAGC CCTGGGCCCT GGAGAATCTC TAGCTTAGCT ATTTTAGACT  
 TGGGGTCAA GAAGAGAGGC TCTTGCCAA CTCAGCAACA

SEQ ID NO:1104: (Length of Sequence = 400 Nucleotides)

GGAAGCAAGA CAAAAAGGA CAGAAAAGCT GGTTTAGGTC TTCAGTATGT TTATTGTCC CTCACATAGC GGCTTGATCT  
 GTCTGCCCTGT GTGTTACAT AGTTAACCAG AAACGCTAGG AGGAAGTGT ACCAGTGGGA TACCTCCTTA GGTGCCAAAG  
 TTTTATTTTG AGAAATAATA TTAATTTCCT CTCTGAAAT AAAATAATAA TAATANGANT GAAACCCCA AACCACAGTG  
 TGAGTCTCAG GTTAGCATTT GAAAACATCT CCAGAGACAT TGTTATTCCT CAGGAGGTTT CCTGACTCC TTAAATGTGG  
 CTGATGTTTC ATGGTTAATT TATTTANITT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCCAGTGACG AGGGTGACCA AGCCTGGGAA GGCCCCAGGG GTCCACACACC AAAATTAAAG GTTTATTATA CACAAGAGGA  
 CGTTCTGTCC CTCANAGTGG CTGGCCACCC TCCCCACTCT GCCCAAGGTC CTGCACAGAG GTTTGTCTC AAGGGTGACC  
 CTTCTTGGCC GCCCAGAGCT AGACCTCCGG CGGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCACTT GGNACAGTNC  
 TCAGCCACCG NNTTGGCATC TTGTCTTINA GGTAGGCGCC TTNTTGGCA TTCAGACTTG AGTTCCAGCC ACTCATAGAA  
 TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCCGGGCC AGAACAAAGG

SEQ ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGTATCINTT TGANTTCTAA ACCCTTGCTT TTCCCACTGC AAATTGTTTT GGCTAGAGAG CAGGCTATTA AGACATCTTA  
 GCCAAGCCAA TTTCTGAGA GTNCTGCAGG TACCAGGTGT TGCTGGAGCC CAGCATCTGC TCAGAGGAAG GCAGAGAGAC  
 CCAGAGGAAC CCAGAATGAG ACACTCATTT TTGCATCCTC AGTTTCCAAA TTAATTTTNT AGCTCCTGGT TAGGACCCGA  
 NTNACAGAGA CCAGGCAGCT NTCCAACAAG AATGCTGACA GGTTTCATTG TCCTCTAGGG TAGCTGCTGN CTAAAGAATA  
 TTTGATTTTT TGGG

SEQ ID NO:1107: (Length of Sequence = 346 Nucleotides)

CTCACTTTAG TTTGAGTCAA TATCTGAGAA AAAAAGAATG GAGTAAAGC ACAGAAAGCA AAACCTAGCT TAGAAAATAT  
 TTCCTAATTC AAAAAATGAA CAAGTCAGAT TCTGTAAAGA TATCCAGTGA AATCTTGAAG AAATATTGTA TTGATTATTA  
 ATTAANCTGA TTGAAAAGTG ATCTTGGGTT CACAATGAGG TTGTTGAACA AGTAGCATTT TCATACAATT GCAAACCAAT  
 TCAATGTTTT TNCATACACT GTTACATTT CTTNCAAAA TTGATTTCT TCTTCGTGAT CCTAGTCAA TTCTGCCTTC  
 TCAGTAAATC TTTATCAAGT TTGCAG

SEQ ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCCTGGCGAC GTGGTCCCGG TAGGAGACTT AGACCTGAGC TGGATCTGTT GACCCCAAAT TTGTCTTTTC CCACCAAGAA  
 GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCTGAACCT AAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA  
 GCTATTCGGT TTCAAAGCGT TCCTAGCGCC CAGCTCTCCT AACTCCTGGC CAGTGTCTTT GACATATATG TAATACATAA  
 AGACTTTGTT TCGCTGGTG TGTTCTCTGT GGAAGCCTCT GACTCACCTC CGTGTCCAG TAGCACCTG TGCAAGCCTT  
 CCAATGTGCG CCTTATTCGG TGGCGCGGAA GATAATAGTT TGGATTNCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA  
 CTGGGCACAT

SEQ ID NO:1109: (Length of Sequence = 352 Nucleotides)

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CGCTCGTNTG TCCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA  
 AAAGATTCCA GTGCCCCGTA AGAGGCTCCC TTCTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA  
 TACCGTCTAT AACCTTAGGG GGCCCTCGGG CAGGCAAACAT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC  
 AATGNCACAN CTACTGGTGA CCCCTTTTGA GGGGCATTTC TCCAGACAGA AGGCCCTTG AAGCCTAGGT AGGGCAGGNT  
 CAGAGATACA CCGTNTTGT TCTCGAAGGC TT

SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GTTTNTTCA TTTATTNCT CCCATAAAA CAGTATGTAC AAGGGTTTGA TTCAGGGGAG AGAAAGGATA TATGAAGACA  
 CATTCTTCCC TCTTCTATTC TCTTACCTGG TTGAAATAA ATAGGCATAT AGTCCNGTTT ATTATGGGCA GGAAGGTAGG  
 TAAAGATCAC CTAAGTNCIT ATGGCGTGT GGCCTTTGGCA CATGGAGAAT GAGTTTTT

SEQ ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTAT GAAGAAGCTG GCCTAGGTAG GGTACAAAT GGGTTTTACT GAACITAAAC AGCTAATTGC TACATCTCTG  
 AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT  
 GTTAATCATA CCATCTAAAA AGAAACTGT CGACTAATCA TGTGTTTACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGTTTATA GGCGAGGAAA TAAACACTCC TTTTGCTGAG  
 ACTAAGAGC CAGGTTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC  
 GTTCATTCTC CCAGCTACTT GCTAAGCACG TNCCTGTGTA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG  
 TCCTGCCTGC CTGCCTGGAG CTCTATTITT CTINATGGGA GAATGCTGCT CCATTTTGT ATTGGAGGAA CTTTTTGCAA  
 GCAAAGCCTN TTTGGGAAA AATGGCGGGC TAGAAACCTG

SEQ ID NO:1113: (Length of Sequence = 448 Nucleotides)

GCGGGTACTG CGTAGTGAT TAGAGTTTTT NCCCTGCCG AGGTGGGATA CACGCTAGCA TCATGGTGA GGAGGTACAG  
 AAACATTCTG TACACACCTT TGTTTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTA GCTGATAATG GAAAACCTGT  
 GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCTGTNTTG CATATGCCTA  
 CTTCAAAGA AAATCTTAAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTTAT AAACAGTACC CTGCCAATCA  
 AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGGT TNNTTTGTAC AGCAGATACT  
 AAGTTCCNGA GGATGCCAG TGATCAGNTG CACAGTCTTA GCGGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GGCCGCCAGG TGGTGCCATG NTCTNTGTN CTGTGCGTCG GCGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC  
 CCCACTGAT GTAGGTTGCG CACAGGAGGG ACGGAGATCT TGCTGGGCA GGACGCGCG GCGGAGCGC CACTCCCTGG  
 CTGGCAGGC ACCATCACCT CGTGGACGGG CCCGTAATAC AGCCACGGG GCACACCGTG GNTTCTNCGN CAGCCTGTTG  
 CGAGCTTTGA TCTCTTGTA GACAAAGT

SEQ ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCCTGGN  
 AGTCTCTCTG GGCCTGCCAC TCTTGGTGAT CATCACACTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA  
 AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGGAT GAAGAAGACC TCTGGTTCTC TGCTCAACCC



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AAGCTTTCTC CAGATGGAGA AGAGACCATC ACTGCCTGTT TAGTTAGGCA GGAANGCAGA GGTGTTTCTT TCTGGGGCT  
AAAGNCTCCT TCTGACCACA CA

SEQ ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTTTGGG AGGTAGGGAT CATAGTTCCA CTTCATTGAT GAGGAAAACCT GTAGTGCAGA GATGGCATACT ACTGTCCAAG  
AACATGGTGG TGGATGGAAC CCAAACCCCA ACTTTTGCTC CCATGTNCTC TGTCCACTGG CTATGGCTCT TGCCCCGTGT  
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTGGATTCC  
ACCATCTTCA AGGTCCCTGC CAGCTTINAT TTATTTAAAT TTGGATTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT  
GGGTACCAAT GGATTAAAGG GGTINAAATC TGGNGGCTNG TGAGTAAAT TAGGGTCCCC AAATGG

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AAGGACCGGG ATTCTGATGA AGCCGTGTTT CTCACTGCCT GAAGTTTCCC TTGGAGTTC CAAAGTAAAG GACACATAAG  
CAACACTTCC AAAACAAGG GAACAAGGTG GTTTATGTGA AAAACAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAAT  
GCAGCTATGA AAAGGAAAA AAGTCCCAG TTCTTGATTT CTAGATACT GAAGAGGACG TAGCATTTC TTTATCAAAT  
ATAAGGAAAA TTATTCACCA TTTTGAAGCT CACCCTAGAC TATGAAAATT ATATTCACTG CAGAGCAATT ACTTCGTCA  
TTACCTGAAG TGATCAGTAT CTATCTTCCT TGTATAGCA TGCATCTCTC AAAAAGGCCT CCACTCCTTT CCCTCACATC  
TGTGGTCATC ATGATT

SEQ ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCCAGGGC GGCTGTGGAG GTGTGGGA AGCTGAAGGA CCTAACTGC CCTTCTCTG AGGGTCTGTA  
TATCAGAG CCAAAGACAA TTCAGGAAGT GCTGTGCAGC CCCTCAGAGT ACCGCTTGA GATCCTAGAG TGGATGTGTA  
CCCGGGTCTG GCCCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG  
AAGCTGGGCC ACGAGCTGAT GCTGTGTGCG CCAGATGACC AGGAGCTCCT CAAGGGCTGT GCCTGCGGCC CAGAAGCAAG  
CTACACTTCA TGGACCAGTT GCTCGATACC ATCCGGAGGC CTGACCATTG GGTGCTCCA

SEQ ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATTCAA GAGTCTTTAT TGAAGACTTG AGATGGGACT TCCAACCTCAG AGGATGTGGG AATCCAGCT CAAATGATAC  
AGGATAAACT GGGATGGGCT AGGATGGACA GGCTGTGGAT ATGGGAGTCA TGGGTCAAAG TCTTATCCCA GATGGCTCCA  
GGTACAGTGG GCTTCTGGG CTGGAAGCTG GGTCTCCCC ACTTCATTCT GCTCAAAGCT TCTTGAAGGA GCT

SEQ ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAACAA CCATACCCCTT NCTTTTGAGG AAAACTTACA AACTTTATAA AGAATAAACA TGAATCTNCT TAGAAAGTTC  
CAAGATAACA TACACAACCTG ATTCACCTCT TCATATATAG GCACCACACA CATAAAGATG TAGCCTAAAT CACAATCACT  
TCTCACCAGG GATGGAGATA GGAATTACA TTCTTGACTT CATTAACTCT CTAATTGGC AAAAACCTCC AAGCCTTTTA  
TACACATGCT GCGTGTAGGC CAGATCTCAC TCATTCTTAT AATTGTGCAA ATAATATGGA GACCAAAAGG GCAGGGTTTT  
CATTT

SEQ ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATTT TTGTCTGTAT GTCCTAGCAC TGTTCACAA CAAATTTTNC TAGTCTTGT TAATTTINAT TTGTATACA  
ATGGAAGCAC AATGTTATAA GGAAAGGTAA TTTTAAGCTA ACAACCACTG CACAGCTCA GGTTTTAAAT TACAACCACA  
G

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SEQ ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTTTTITA CATCAAAGTA CTACCAAGTA AAGAAITTTAA AAATTACTTG TCTAGTCATG ATATATTTTC CTNCTGCTGC  
TGAAAAATCC CTGCTTATT ATTTTCATGTC CCTTTATCAT TCATTTCATG ACACTGACAG CAACTTCGCTG AACAAAGTTA  
AGAATAGCTG ATATTTACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

CCCTAGAGTT AAATTTACCC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA  
CACCACAGCA GCACTGACAG AAACAGAAAT GATTTCAGAGA AAGCCAATTA AAACAGCCAG GGGATAAAGC AGATCTGTAT  
GACATTAGCT TTTT

SEQ ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGGTT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTGTCGATCC ACCCGCCTCG GCCTCTCCAA  
GTGCTGAGAT TACAGGCATG AGCCACCGCG CCTGGCCCGAG GGAAGGCATT TTTNAAGAAA TAATAGTTGA ATGAGATCT  
GATAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEQ ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNTNT  
CTAAGAGATG TTTTAAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG  
AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTTNTTGTA GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTTT TCCTAGGGGC CGCAAGACGG CTAATTTATT ATAATTCTC CGCCGAGTT GCCCTCTGGC GCCA...ATGC  
AGAACGGAGC GCCCGGGATG CAGGAGGAGA GCCTGCAGGG CTCCTTGGGT AGAACTGCAC TTCAGCAATA ATGGGAACGG  
GGCAGCGTT CCAGCCTCGG TTTCTATTTA TAATGGAGAC ATGGAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC  
GGATTAGCTC CAAGAGCTCT CACT

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GTGTGAATAG GCAAGCACTT TGTTTGTTGT ACTAAGGAAC TCAAAATGAT AGGCTTTTIG TCACCATGTG CTTCCAGGNT  
CTCTGTTGCA TGAGCAGAGA TAGAGGATCT TGCACAAACA ATTAAATGCT CTAGCCATAA GTAGTGCAAG TTTCCNITGC  
TTGAAATTTA CTGCTGATAG CCACTTGGNC ACACCTTACT TCCAGAGGCT AGGAAGTACA GTTTTCCAC AGTCTAAGAA  
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA  
G

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ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA  
AAATCTCAA TTGACATCCT AACACCACAA CTAAAGNTC TAGAGAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG  
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG  
AGCTGTTTTT TTGAAAAA

SEQ ID NO:1129: (Length of Sequence = 163 Nucleotides)

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CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA  
AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTG AACCCCAACC TTCAGAACCT GGAGGAGACA  
ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTACTGT TCAAACAGCA ATGTTTAGIT GTACAACACA TAAAGTCTAG  
CAACAATTAC AGGNCCAGTT TGAGTGTCTG TTTGCTTGTT TTCAATTGGG AAATTTAACT GTAATGTCAC CGTAAGATTG  
GCTGGGACTG GTAACATTTA AGAAACGGGT TGINCTTGCA TCCCTAGGC GTGGGCCTCT TGCTCCATCA GGACTTGGIT  
GTAGATGAAT GGCCACAAAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA  
ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTGCAAAC ATTCATGCAT CT

SEQ ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGINCTG GTGATGGGGT TACATTTCCA TTTAAACCAG AATCCTGGAA GCCTACTGAT  
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TTTCTNCTGG ACTTCCAGTT CATGCCTGCC TGTATACAAA AACCAGAGGG  
CCTGCCTCCT ATCAGINATG TGGTTCTTGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGGNT CCTCGAATTT  
TGCTTCGAGG ACCAGACTTT ACACCAGCCT TTNCTGATTT TGGGAAGGCAG ACACCTGGTG GAAGAGGCGT ACCTTTTTTG  
AATGTTGGGT CACGAAGATC TCAACCTGGN CAAAGAAGAG AACCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA  
CACCTG

SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTTTTGGIT ACTTCAGGCA GGAGGGTAGA CATAGCACTT ATCTGGAITG GATGTAGCCA CAGGATTAGA ATTGTTGGGT  
CATAAAATAT GTACATGTTT AGCTTTAGTA GATCTTGCCT AGAGTTTAAA AAATTAAGAA TTAATAATTT TTTTAAATTA  
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTATA ATGTAGTTGA TCTTGGTTTT AACCAGAGCA TGTNGCTGGA  
TTTTNCTCCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTCTTAG TGATACCATG CACTTTTTTT TAGAACTTCA  
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAAAAATAC TAAGAAGGG ATNGTGGTGG TGGTGAGGGA GGCAGGAGAG

SEQ ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGGCG GCCATCCATG GAGGAGCTCA TCCAGCAGAG CCAGTGGAAC CTCCAGCAGC AGGAGCAGCA CTTGCTGGCG  
CTCAGACAGG AGCAAGTGAC AGGGCCGTG GCCCAGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT  
AGACATGAAC GATTTTAAAC ACCTCCTGCA GCCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGGGAAGAACT  
GGNIGTTTCA CAATGCCAAG TCCCGCCGC ACTGTGAGCT GATGGCCGCG CACCTCGGA ACCGCATCAC GGCINATGGG  
GGCACACTTC GAGCTGCGGC TGCACCT

SEQ ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGGCCACT TTNCCATAGG  
GCTGCTGCAG TATGCCCAGG GCGCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG  
CCTGTGAAAC AGCAAAGATG GCAGCCTACC GCTCCCTTTG GAAGCTTTTC CCTAGGGAGG TATGAATGAN CTNITGCTG  
GCCCCAACAC ACCGTGAGGA GGTGGCTINGA GACCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG  
TGCTTAAAAA AGCAGTCTGG GCCTCATTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

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SEQ ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCACTGA GGCTTGCCCT TNCTTACTCC TTCTTGGGAA CCCATTTGGC AACAAAGTGAA  
GAAACCTAGG CCAGCCTNCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG  
TAAGCCTAGC CAACACCACG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAA TTGCTGACCA AAAGAATTGG  
GAACAAATAA ATAATTATTG TTTTAAGCTA CTGTGTTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG  
GATGACCCCA ATTACTTGAA CTTCTCTTAG GCCTGTMTTA TCACGTGCAA ATAGGGGATA ATTTTAGTAA TTINGGGTTG  
CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGTGCGAG CCACCACGCC CAACCCAGAA CTCTTTTTAT TTTGCAAAAT TGAAATCTA CCCATTAAAT AGCAACTCTN  
CTTTTCCCTT CTCCCCAAG CCCTTGGCAA CTGCTTTTCC ATTTCTATGA CAATCTCTAC TCTAGATACC TCATAGAGGG  
TGAATCATAC AGTATTTGTC CTTTTATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT  
ATAATTCACA AACTGCAGAA TTGAATGGTT TTNAGTCTAT TCACATOGGA TATGTTTTTG AAGAGACAGT AAAACCAATC  
CTTTTTTCT TAGGTTCTCA GACACACACA TGCTTCTTTA TCTGGCAAGT CCGTTTATAA A

SEQ ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTTTTTGT ATAGACAGGG TCTTGTTATG TTGCCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCTGCCTTG  
GCCTTCCATT CCTCTACTTT ATACCACGGT TATTACCAA GCCTGTCTTT GTTCAGTGT A TTCTCTCATG GAAAACTGA  
GGTGATATTT ACCCTGGTTT TTCTACCAGT GTGTAACGT CGCTAGTACC AGCTCAAAA ATAAGAAATG AATAAATGAG  
TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTTCOA GTGATCTCC CGCCTCAGCC TTCCAAGTAG  
CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAA GATCCTAGTG  
AAAAATGTGG CAAGAGATAG CAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCTNCT  
TTTGTCATTT TAGAAATACA AATAAAAATG ATGATGAATG CNCTTGCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT  
GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG  
GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTTAT  
TCTAAGGAAG TACCTAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACCGAGAA GCATGCAAGC GGTGGCTCCA CCGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG  
GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAA GAAACAAACT GTGAGAGTNA  
TCGGGAAAGG GGCAATAAGG CCTGTAGCCC ATGCTCCTCA CAGTCTCCA GCAGTGGCAT TTGCACAGAC TTCTGGGACT  
TATTGGTAAA ACTGGACAAC ATGANTGTNA GCCGGAAAGG CAAAGAACTC CGTGGGAAGTC AGTGCCAGTG ANGCGCTGGC  
GGTGAGGGGG TAAACCTTTT NCATACAGCC TTCGAGGCT CTCCACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TTCTTTTCTT AAAAGAGTCT GAACGCATCT NATGCAACAC  
CCAAAAGTAT CCTTTNCTC CTCGTTACAG TATGTTTTGG CTTTGAATA AATGATTAGT TATGAACAA TATATGGAGA  
AATATCTTAC AAAAGGAAGT CATTTCCATT TTCTAACATC TTTTACATTG CACTAATTAC ATGGTTTAAA TGAATATCCC  
TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTAGACC AGATATATCC TTCTAAAATC

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ATTGTAGAT AGAGGATTCT CTTTTTGCT AGTAAATACC ATTAACATAT TINCAGANGG CTTGGTCTAG GGTCAATTAT  
TCCAGGGCCT CT

SEQ ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCCTGT GCGCGCTCC GGGTATCCGG CGCCTGANGT TTTAGCTGCG GTGGCGGCGG CAGTGGGGAC CGACTNAAGA  
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCGANTTGG TGTAAGAAAG ACACCGAAAG TAAAGAAGAA GAAAACITCA  
GTGAAACAAG AATGGGATAA TACCGTACT GATCTAACCG TTCAATCGGC AACTCCTGAA GATCTGGTAC GCCGTATGA  
AATACACAAA TCGAAGAATA GAGCATTAGT AACTGCGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA  
AACCAGNAAC TTAAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GNTTCTTTC TGATCAATAC CAGATGCAAA  
GATGTGTGG

SEQ ID NO:1142: (Length of Sequence = 392 Nucleotides)

TTTTTTTTT TTTTTTTTT TTTTCNGGG ATTGAATGTC TTTATTAAT AAACGAGTAA ATGGTAGCAC AAATCACCAT  
CAATATTTTT GGAAGGATTG GGGACAAGAT GTCGAGTCAG AATATAATTN TCCATTTAG GGTCTCAATG TAGCTGAAGA  
ACTGTGCCCA CTGATCAGTA TTACGTATTG CAAATGCAGG AGGTAAGGCT AAAATAGGAC TTATGCGGTT CAGAAGATTG  
ANTTTGAAAC CTTAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAC  
CCACAGTTAG GAGCAAAGTT GTAAAGTGAG TAGGINTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATTN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTTCTCTC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAATATTC TTGCTCTTTT TTATCACCTG ANCTGAAAAC  
CCATTGTAAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCCA GAAAATTCAG GCTAAGATTC CTGGAAAGTG  
GGCTGTGGGC ATTATTIAAA ACACACACAC AAAATTTACC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTTATTTCA TTCCATTCC CAGAAAGGA GTTAATGAAG ATAAAAATTT ATTTTAAAG GTCTTTATTG  
AGAGAACTT TGTTTTCTGA TATGAATAT TGCAGATGTT TTTATAAATA CTTTCATTAA AATGATGTAA ACAGTAGTAC  
CCAACACTGT AAACCTAGTG AAAATAGTAA ATGATCTTT TATTACTAAG ACTGTCATGC ATTCTGAAGC AGTTGGCTTT  
TTTTTAACCA TAGGAAGTCA TTTCCCTCTA GCTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTIA  
AATAAAAAAC TAG

SEQ ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA  
GCAATGCTGA CCTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCTTT ATCCAGANT  
CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCAGGT TCAGAAACAT CTTCC

SEQ ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATCTTAA ATAATTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCCTTG TATATTACTA  
AGGTTACCAC AACTCAGNT GGCAATTACA CTTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCTINCCA  
GTGAATGTCC CTCCAGTCAT CCGGTGTAT CCAGAGATC AGGCTAGAGA GCCTGGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

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ATTTTCAGTGG CCATTAAAGAC CCTGAAAGTT GGCTACACAG AAAAGCAGAG GAGAGACTTC CTGGGAGAAG CAAGCATTAT  
 GGGACAGTTT GACCACCCCA ATATCATTCC ACTGGAAGGA GTTGTACCA AAAGTAAGCC AGTTATGATT GTNACAGAAT  
 ACATGGAGAA TGGTTCCTTG GATAGTTTCC TACGTAAACA CGATGCCAG TTTACTGTCA TTCAGCTAGT GGGGATGCTT  
 CGAGGGATAG CATCTGGCAT GAAGTACCTG TCAGACATGG GCTATGTTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT  
 CAACAGTAAC TTGGTGTGTA AGGTTTCTAA TTTCGGACTT TCGCGTGTCC TGGAGGATGA CCCAGAAGC

SEQ ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAAATGCT TGCCATCATG AGCAGAAGCA AGCGTGACAA CAATTTTAT AGTGTAGAGA TTGGAGATTC TACATTACAA  
 GTCTGAAAC GNTATCAGAA TTTAAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTNATG ATGCCATTCT  
 TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATT T CAGAATCAGA CTCATGCCAA GCGGGCCTAC AGAGAGCTAG  
 TTCTTATGAA ATGINTTAAT CACAAAAATA TAATGGCCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANTTT  
 CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAAATC TTTGCCANGT GTTCAGATGG GGCTAG

SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAAA GAAAGATATT ATTCAGAAA AGAAGTTAGG AGCCAGGTGC  
 AGTGGCTCAT GTCTATTATG CCAGTACTTT GGCAGGCCAA GGCAGTAGGN TCATTGAGG CCGGGAGTTC AGAGACCAAT  
 CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAGTG TTTAACAAT TAGCTCAGTA TGGTGGCACA TGCTGTAGT  
 CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCCTGGAATT CAAGGCTGCA GTGAACCTAAG ATGGTGCCAT  
 TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGTGTA ATCTAAGCTT AATAAACC CCCTGGAGGCT GCACAATTC TTGGCATCTC TCCCCTGCCC TCTCCATCCG  
 CATATTCAAT TTGGAGTTTG GAGAAGTATC TAGAATCTNC TCCCACCCCA AAATGCCAG CAGAGCCCCC CCGCCGCCCC  
 CGCACCCCTT GGAGCTGCGG CTGTCTGAAT CGTTGAGATG TCTGANACTG TCGGGGTTC CTACCTAGTG CTTCAACCAG  
 ATCACCTCAC TTTTGAGTTT CCTTCCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAAGACGAA GGAGAGTAA AGGCATGNT CACATGCCAG CAGGCAGAG AGCGTGTGCA GGGGAAGTGC CCCTTATGAA  
 ACCCTCAGAT CTCGTGAGAC TTATTCATA CCATGAAAAC GGCACAGGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG  
 ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTGGG CAGGGACACA GCCAAACCAT  
 ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT  
 TTTTCCAGTT GTAAATGTTT CATCCAAAAA AACTGTGATT TTGGCATAAC TTTTTCAGG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCTTTT GAGTACTTA CTTTGAGTCT TTGTACCTT TCCTCTGATT TTTTCACATG GTTTAACTCA GTGTACCCAA  
 GAGTACTAGG TGCACTCAAT TCTGCTATTA ACTCTATAAG CAAGTNCITTA AGAAAGTTAA TGTTAAAAA TAATCTTAAA  
 ATTGTCTTGA TAGGAAAAAT GTATTGAAA TAAAAAAA TTCTTATGTT GACTTCTTGG TTTTGAAACA ATGAATATA

SEQ ID NO:1153: (Length of Sequence = 275 Nucleotides)

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CAACCTCCTC TTCAGTGTCA AAAAAGCCAC GGTTAGACCA GATTCTGGC GCCAACCTTG ATGCAGATGA CCTCTAACA  
GATGTATGTT TTGTTTCCTC CTTTCATCTC TAATAATTGA TTTACCATGT TTTTCTAAAA TACTTGTTAT GTCTTNCIT  
TAAGAAGTGA CATATATTTA TGTTAGTTA CTGTATTCA AATATAGCCC TGACCTCAGT GCTAAACTTT ATAGTTGATT  
TTAAAATCAA AAGTATTATT TTGTGGGACT TTAAG

SEQ ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT  
TTATATTTAT GCGCTATACA CATATATGNN CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAAGG ATAATGATTA  
CACGTAGGAT AAACATTTAT CAAAATTGT ACTATAAATA ATA

SEQ ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAAA AAAA CACTAAGCTA TTTTGAACA ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAATC  
CCAAATAGGC ATTTTATAGC ATTAACCAA AAAGAGAATC CAAATGAAAT ATTATACCTG ATGTTCAATT TTAATAGCAT  
CTTGATAAG GTATGCTTCC TTTTATTGA NTACATTTCT GNACATGTAT GTTATAAAAT CCAGGNAACA GCCAAACCAC  
AAGTTAACTC TTAACAATGA ATATACATAG TTAACCCTAT AGTAAGCAGC CCCTTTGAAA AGCACTGATG CACCCAACAN  
TTATATGGTT CCATTTTATA AGG

SEQ ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCAATT GCCATTAAAC CTCCCAATCT TTAAGGGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAANC  
TATCTACAT GGTTGTAAT TGGGCCTAAA ATAAATGACT CTAGTGGTAG CATTTCAATG AGGCAGGTCC AAGGAAGACA  
GATTTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCTGAGGG ATGCTTGAC GGAGCCACAG  
CATGANTCA TGTTTCTCTG AATCCATCTC AGTTCATGTG ACAGGATGGA AATGCTTCCT TTCTTAGCCA GTGTGCTTG  
TAACGAGTTC CTTGCAGCTC AGGGAAGGGA GCAACATGTA CTGCTTTGTT GCTTCCTGTA TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGCTCTCA ATCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTCAAG  
TGATCTCCT GCCTCAGCCT CCTAGTAGC TGGGACCACA GGCACTCGCC ACCGCAACCA GCCAACTTTT GTATTGTAG  
TAGAGACAGG GCTTCACCAC GCTGGCCAGG CTGGTCTCAA ACTCTGACC TCAGGTGATC TGCTGCCTC GGCTCCCAA  
AGTGTGAGA TTCCGGCGTG AGCCACTTG

SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTTATAGTT AATTCCACGG CAGATTTTCA TTTCTATCGA ATATATTATA TGTAGAACT AGGGCCTTAA ATAATTAAGC  
TGACTTINCC TATTAGTTAT TCCTTAAGAT AAAATTATGC TGGTGAAAT NACTGTINGAA TTTCTCAAGA AATTAAGCTC  
TATAGAGGCA TAAGTAATCG AAAGACTTTT

SEQ ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TTCCTGGGAG TGTAAGCINN TCACCTGGAC CCCACAGCCA GTGAGCAITTA GTGCTTATAT TCCATCCTCC  
AAAGCTCTTT CTTCATACCA GACCACACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA  
TTGTTTAGTG GTCTGGCATC ATCTATATTT ACTTGGCTTG ATTTGGGATA GAGTATAATC CTAGTCTCTG ATGAAAGGAT  
TTINATGAGT TAACCTTATG GGGTGATGGG ATTTATGGGA TTATTTCCAC CCTTAAATG ATTTTGTGGG GAAAAAAGT  
GTACTAATCC CTAATTTAGG

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SEQ ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAAACAAAT CAATTAACAT GATTATCCCA GACCTTTCTT TTCTTACTGG AAAAAAGAGG GCATTAAACT GGATGATGAC  
AATAACACCA TAACTACAAG CTTTATATAA AGTCCTTTAT ATACAGTGT AATACAGTGA AAGNTCAACC TTATTGAAAG  
AGGTCTGGCT TCTGCCCTCA GCTACTGGGA AACAATCACT AGGCCTCTGG CATGT

SEQ ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCTTTAAA ACTACTTGA ATCTTATAGA AACATCAGAA TCTTTTGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT  
GGAGTGGTTT TTAACTCAA GGATTAGGA CCTTGGCTGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC  
AGGACTTAG ACAGAGTCAG AGTCCAGTTT GTNCTGAAAC ACAATTGAT TTCAACTATT GTTTAAGTG AGAGAGGAAA  
GTGACATTAT TATGAGTGTA AATTINCIGC TTTTAAAGTA GAAGTTACTG ACAATIGA

SEQ ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCTTGTA TATAACTAAT GCTTTGAGGG AGAAATTCAA ATGGCTATGA AAAAATATTT ATAATTCAAT  
GATAATAAAA ATCTTACACG TTAAACTTG AGAATGTAGT TAAAGCAATA CTGGNCATA ANCTTAGCAC ATATTAGTAA  
AGA

SEQ ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAAACCA GGAGCATTTT ATTCAGATGT TAAATGAACC AGTTCAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT  
GGCAGTGGAG GAATTGCAGA AGCTGGAAGT GGTACATGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA  
AAGGTTAAAG GCATTAGGAT TTCTTGAAG ACTTGTGATA CAAGCGTATT TTGCTTGTA GAAGAATGAG AATTGGCTG  
CCAATTINCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTTT TATATCTCAC ACTTCACACC AGTGCATTAC  
ACTAACTGT TCACTGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Sequence = 260 Nucleotides)

TGCATTCTTG CCTCTTGAC AAGTTCGCT TCTTTACAAA GGACTTTGCA AGTNCCTCAC CCAGACCATC TCACCTGTAC  
CGAAATAACC TCCCCTACTA GCGAATGAGC AACTTTGGAG CAGAAAGCAG AACTGCATC ATATTTCTCT TACTATGCAA  
ACTGGTAGCT CAAACCTCAT ATGACCTCAA AAACTATAA TTGCTTCAAC CTAAAAAGC TGATTGTAA AAAAAAAAAA  
NGCTGTGGTT GCACACAGT

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGTATT TAAAAATGAA TATTAATATA ATGAAATGNN TTGCCTTTT TGTAGGCATA ATAAGCCAAA TACTTTTTTA  
CCCAAAATAA TTTTINAGAGA AAATGATGTA ATGAAAAATT GTACCATGAA TTAGGAGCAT AGTTTTTNC ATTTAAACGT  
CACCATTACT TAAAAGATGA TTGATTATTG CTATACCAA TCAGATGAAC TCTGTTTATC ACTTTCTTNC TCTGTCCCCA  
AACAATTGG TTCAATCAGA CTGAAATGTT TGTGCTTCA ACTTATTAGA ATGGAAGATA ATGCAGATAT TTCTGTGGGA  
AATAAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTTGTCAA ATTTNCCAT TTAAATGGC CAGGAAAAAC AATAATTATT TTCCTGATGC TGAGGTTTTA  
TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANTGAAAG TAGTCATTGA  
CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAATAT TTATTTTTAA ACAACCACTT TTCAAAGCA



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GTGTGTCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTGAGAA GCAGAATAAA ATATGATACT GA

SEQ ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCTCAAGA AGACAGTCAC  
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTCAGAAAG AATGTCTCAA AAAAGAAAAA  
AAAAGAAAGG AGTGGGTAA GTATCTGATG ANTTINCCAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA  
AANNIGATTG ATAAATACAT AGANCATAAA GCAAACTCTG AAATAAGGCA ATTATCAACT CCAGG

SEQ ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGTTTTAG TGATGATCA GTGAGAAACA TATTTGAAGC AACAGCACA GTAAGTGGAA GCTGTAGGTA CTCAATAAGT  
GTCAGTTTCC TTCTCTTCT AAAAGCTGTG CTTTCAAGTC AATTGTATGT CTAGAGTCGC ACTGTCTGGT ACAGTGGCCA  
GTACTAGCCA CATATGGCTC TCAAGTACTT TAAAGAGGGC TAGTCTGAAT TGATATGTTG CATACATGTA AAATACTTTA  
AAGAGGGCTC ATCTGAATG ATATATGCCA TGCATGTAAA ATACAAATCA GATTTCTAAA ACTTTGTACC AAAAAATACC  
ATAAAATAAC TTACTAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TCNTCTGTC GCCAGGCTGG AGTGCAGTGG CAGATCTTG GTTCACTGCA AGCTTCACCT CCCAGGTTCA  
CACCATCTC CTGCCTCAGC CTCCCGAGTA GCTGGGACCA CAGGCGCCCA CCACCAAGCC CAGCTAATTT TTTATATTTT  
TAGTAGAGAC GGGGGTTTCA CGTGTTAGC CAGGATGGTC TCGATTTCTT GACCTCGTGA TCCGCCCGCN TTGGTGTCCC  
AAAGTGCTGG GATTACAGGC GTGAGCACCA ATGCCAGCC TTGGAGACA CTTTGTATG CCACAATCA GGGTAGGGAG  
GGCTGGGAAA TATTACTGGT GTGTAGTGA TCGAGGCCAG GGATGCTGCT AGACATCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GTTTTAAAGC CTCGGACAG AGCAGTATTT CGTTTAAAC TTGTMTTTC TTAAAAGCTT ACAGTGTGTTG GCTAATCTC  
CTCCCTTTT TACAAGACGG GGGCCGGAGG GTGGACACTG GTGGCAGGTT AAGGGATACT GTCACTTTAA GAAGCCTGCA  
GATTGAAGTG TAAACATGA GAAATTAGGG GCTGATTTT TAACTGTGT GAGATATIAA CCAGCCGCC TGTATAAAA  
TCAGGAAATC CAAACAGCGA TTTACACCGA TTAACACCCC CTTTATATAT TTTTACAAA AATACTGTA GAAATATATC  
AAACGTTTTT ATCTCTCTG TCTTTTTTG TTTTTTAAA GTGTCAAAG TCTACATNTA AATATAAAN ATTAAAGTT  
AAACTCTAGC CCTTCAGTA GG

SEQ ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACAGCCT CCACACCCAG GCTGCTCTTG GCTATACAGG CTACCTCCAT  
CCCTGANTGT TGTAAATAGGA AAGTCTAAAC ACACAGAAGA GGAGCACAAA ACCAATAATT ATCACACATT CAAAATAAAA  
CTAATCCATA AAGAAAAGTA CCAAATCAA CAAAGACAGC AATGCCTGAA AACACTGGGC TGTATCAGCA AATAGAACAA  
AGAAAAATAN GCATAATTA AACAGTAGAA GGTGAAGGAT AATTTTAAA ANTTAGATAT CATATTCTGA TTATTGAAAT  
AAAAAACTTA GTAGAAAAGC TTAAGTGAAG AGGATCAAAC CTGAGGAGGA CCCCAGCAGT TTG

SEQ ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAAA AAAAAATCT TTTAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA  
ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCTCTCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT

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GGTTTCTCTG TAGCTACACC AGCTGTTTCAG AAAGCTCATT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCTGGG  
 AGGAGTTATT GTNCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAAA AAAGGTTATC TGGTACCAAA GTGTGCACCT  
 ACAGACCCCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTTNCTA GACTAGGGAG  
 TTGGTGAGGT TTTGCTAG

SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCTAAA TGAAATTAT AAGAAATTG TGGGTTCTGC CCAAGATGAC ATCTAAATTG AAGAAGGTAC ACAGTGAGTT  
 TAAAGGATCA ACGAGAGAAA CTTTTATTAT TCATTTGCAC AAGAAGACAC ATTCAGTATC TGGATTATCC AATATATGGA  
 ATACTTTGAG TTGAAATGAT TAAAGGGTAA TCTTTAATCA TTAATTAACA AATCATTAAAT TAANCAAAAT AATATTTAGC  
 AAATTAAGCA AGTNCATAAG GCTACATGCA AACT

SEQ ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAA ACATTTAAT ATAAACATTT CCAGAATATA GACTGACCTT ATATCAGTAC TTTTNGAGAC CGTTTTAAAA  
 CTATATATCA TCTAAGTTA TTATAGACTG TTTCAATTTT CACTTTTCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAATT  
 AGATTTAACA AAGAAAAAAT CAGTTTAAGN TATTTTCATAC ATATTCCTTG GNGAAAGCTG AGACACATAA ACACAGNAA  
 ACAACAATAA AATACCACCA AACTAACAC AAAACCAAGG AAAGAACTGN TTTTGTAACG CTGGGTAATT CTGTCCTTTA  
 AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCACTCAGGA TGGACACATT AGAAAGAAAC ATTTTAGTTT CAATGTTACC ATAAAACCAG AACGAAAAGC AGCATGCTGT  
 ATTATATTIN NCAATTTAGG TTCCATTCT AACTCCACCT AAAATGAATA TGAACAACT CATTTTAAAG TGTTTGTCAG  
 TCAAATACAA TAATAGTCTA AGTTTATTCA CATATGTACC AACCAAAGCC CAATAAGCT AAAAGGAAGC CAAGTGTAAT  
 AAAAAGGCAG CTATAAGGTC TTGTGTTGA NTTTTTACCC AGCAAGAAAT AATGATACT TAGTAATCCA TCTTTCCCCC  
 CCACIGCCAT CCCTGCACAC ATCTAAAATA GCCTAACTTC ACCTATTCTA ACTTCTGAAA TTGTTTGGG ATTCCGTGT  
 TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCTCA ATCCTATCCC TTNCCICTT AGCCATCCTC TCTAATTINT TTAACCTAAG CCTGTGTGTC CTCAGAAAAT  
 AGGTTATGCT GTTGGTGTG GTGGTTGGTA ATCTATATAC ATGGNGTTAT GCTATTGATT TTGTTGGTA ATCTCCCTTT  
 TTAATCAATA CTATATTAT AAGANCCNT TAAGTGGTTG TATGCCTCTA CTTTATTGCT TCTGACTGCT GCATGGAATT  
 CCATACTCAT GTCCACCACA CTTACTCATT CTCCCTCTTG ATGGACGCTG AAGTTGCTTG G

SEQ ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCCTC TGCCCTCANCT TCCTGAGTAG CTGGGATTAC AGGTGCCTGC ACCACGCCCG CCTAATTTTT GTATTTTATG  
 TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCGGCTCAG CCTCCCAAAG  
 TGTGTTGGATT ACAGGCATGA GCCACCAAGC CCGGCAAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC  
 AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA  
 AATCTTGCA A

SEQ ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATTTNTG GAGAGAATAG TCATACCTAC TTTAAAAGAG AATAAATTGC CTTTCCTAAA TNCCTCTGCT TCGTCCCTTT  
 CCTGGCGTTG CTCTGGAACC TTGTGAGTTA TATGTATGAT TNCGTACTC TGATATCCAT CAAAGTGCAT AACATAGTAC

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TCATGATGCA GTAAGTACAA ATCTTTTTTG AAAGAGATAT TGCTTGINAA CATTTTGGAT TTATAACATT GGCTTATAAT  
ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT  
AAAAA

SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTTCITGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCAITCAT TAGTCTTTCC  
TCAAGAAGAT ATCAAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCTGAGGGG GNCCAAGGTA CATTATGACC  
TTAAAACGAA CTCCTTCTCC ACTGGCCCTA TTA CTCACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC  
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEQ ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTGGG ACTTGAAATC TGTGGCCGAA GACNGTCAC TACATAACTT CAAAAATAAT CAACCACCCT CCCTTCCCAA  
ACCACCCAAA TTCCTCATC CAGCGITAC TTTTTTGAAT CCACTCAGAA CTTTTTNCCT CGACCCCCCT CCCTAAATGG  
AGTTGGGTGG GGGGGAATG AATACTGAGT TGGCCTTTAT TTTTAAAAG ACTTTTGTAT CCAATGAGGC CCCCTAAATA  
ATTGAGTTTT GGGTCCGTGT TGGTTGTGT TATTTGT

SEQ ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACAGCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA  
CACACAAATC ACAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA  
ACCAAAAGCC TTCCAACAAA GAAAAGCCCN GGANTAGATG ATCTTCACTG ATGENTTCTA CCAACATTT AAGAAAGATT  
TAACACTAAT TCTACTCAA CTCTCCACA AAAAATATGA GANGAGTAGA GAAAACCTTC TAAATATCT TATGAGGGCA  
GCATTACCGT G

SEQ ID NO:1182: (Length of Sequence = 345 Nucleotides)

GTGTGINTAG AGGGATGGAC AGGATGCTGT TTATTNCCC TTTCTTGGAA ATGGACCTTC TGTCCCTTCC ATTTGGACAC  
CACAGTGGAA GCTGGTGGCC TGGAAGGAAG GATTAGGTCA TGGACATTG AACAGGTGCC TTGGGCATGA TGTATAGATG  
CAGTCATATA TACCTTGTCT GGNITGGGGTG CCACCTCCAG TGNCACGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG  
ACCCCATTC TATCATGA CTCCAACAG TTTTINATTG TGGAAGAAGA AACTTTNGCA TTATAGAGAC ATCATCAAA  
AACAGTANAA ACAAATCAA CCCTG

SEQ ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC  
CAAGGCCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGGGAC CTTAATGGGA  
GGCCCGGGA GGCCGAGGTT CGGTCTCTCT GINACGAGG TGCAGGTATC TGTGGGACT ACATOGATCG CTGGGACGAG  
CCCTTNTCCT GCTCTTATGT GCTGACCATT CG

SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTTTGCA AACTCAGTTG ACTCACCTCA NATTTGCCAT TCCAATTACA GGGCCTCGAA AGAGTCAGCA CTCAGCCTTG  
CTCAAGGNTC AGATTAGGG GTTGCCCCC GNCCCCGCAA CCTCCACCT ATTGTTTCAA ATGTCTCAA GACAATCACC  
ACTGTATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCITGAGA ACTGTGTCTA GGTGGGGTTA  
CTTTGAACCT TAAACCAACC TTGGGNCCA AATCTGCATG AGCAGGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG  
ACATTTTCC CAACA

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SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGCG GGGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAAC  
 ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAACTT TTAAAGAAA  
 ATTGGTAAT CTCTTAAAGT ATTGTATGG CTITGAATGG GTGTCCTTTT CTAACITTTGT TTTAATTTTT ATGATACACT  
 TATAATTGTT TCAAATAGGC ATTGTGNCAT TTAAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT  
 TTGGACAAAA AAAATTGTTG AATGAGTGAA ATGCCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGGAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTTTCAGCC TGCNAGCCTT  
 CTTCGCGGG CGCCATAAAC GCCCCCAATT TCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTNCGTGCA CGCAGACGGG  
 AAGGGCTGGG GAAGCGGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCCTAAG ATGGTGCTTC TCAGTTCCAA  
 GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT  
 TTGAGCAGAN CAAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTCATAGA TTT

SEQ ID NO:1187: (Length of Sequence = 365 Nucleotides)

TCTACGCAAT TCTGAATAAA GTTTATTAAA TAATATGTAC AGCAAAATGTA GTAATTCAAC ACATCTATTT ATCAAATCAA  
 TCCACTGCAA TGAAGAAAAA TAAATGANCA GAAAAATCTA TGTCCTGCATA GGNCATGCTC TCAGTGTGTA ATTTAAATGG  
 CAATACTTTA AATTAATTGG TTATATATAA TGTCAGTTAT TTTCCTTTCA GAATATAACC TTTTGTGTAG TAACCTATT  
 TAGCAATAGG GCTTAATACG NCTGCAGATA AATAGGNCIG CAAAAACCAA AAACCCAAAA TAATGAAATT NAAAAGGGGA  
 AAAAACTGT AACTGNGNTC AGAGTTACCT TTCCTCCCC ATAGG

SEQ ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATGGCT TACATTTATT TTAAATTCA CTAAATACAA ATCTTGATTG TCATGCCAGT TTTAGATCTT ATTAATTINC  
 AGAATGGATA AATTCAAATA ATCATAAATT ACGGTAACCT TTTATTATAC CAAGGTGTTT TAATGCCATC ATATGANGAC  
 AGATGCTTCA AACAACCTGC ATTAAATTAT ATTNNATA AAATTAAAAT CTATTTTTAA CCTATTGTGA GTCACAAACC  
 GAAAACGTGT CGNCTTTACC TTAGAGCTAA AGGCTTACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGTT  
 TAAACAGNCC CTAAAAAATT CCATATATT

SEQ ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACCTNC TCACTTCTC AAAGAAGAGT AGTGCACTAA AAAGAAGGTT GCACCCGGAG AGCATGTAAA GTGTCTCAAG  
 GGGGACATCT GAAGTNCCTC GTTCCCAGGG AGCCACTGG CTCTCACAA GTAATCTAAT GAAAGCTATG CATTCTCTCT  
 GGGCTCCTCA TATGAAAAAN CCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC  
 GATAAAGACA GCTCAAAAGT CTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTTGTGCTG CTAAGATTTG  
 GGTGCATGGG GCTTCGCTTT GGTAGCTCC CATGGCTTC TTTTCCAAA AAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGTGTAACA TTCACATATT TAATAGTACC TTTAAATAA GCATTACTAC ATTTAAATG GTTCCAAAAT GAATCTATAA  
 ATGGTAATAT AAATTAAAA ATACGAACCT AAAGTGAATA AATTTTAAAC CTTAGCTATG GTATAAATAA TGGTAAATGT  
 ATAGTGATACC TGTGATCAT TAAATGTCT TAAAGATAA CAGCTTGTTA CCAGAACATT AGANACCATA GCCATGATTC

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TCAAGCGNTA ACAATCTACA TTGNTATTT NCTTGGCCAC TGCAATCTTC AAATGANTAA TAAATTTCCA GAATTCCCAT  
TCCCATGGTG TTTTTCCTAA TAGANCTTTT TCACACTCGA TGTTG

SEQ ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCCGGAGAGC TGCCTTCCTC TTCTACCACG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC  
ACCAGACATT GAATCTGCGC TCCTTGAAC TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA  
AACCAACCTG TCTATGGTAT TTNTGTAGC AGCCTGCAGC TCTCTATCAC TCTGTTTTAT AAGAGGCTGA AGTTTACTTT  
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCGATT ACAAGATGAA AGTAAACAGA ATT

SEQ ID NO:1192: (Length of Sequence = 315 Nucleotides)

ACTCCAGCCT GGGGAACAAA CAAGCAAGAC TCCATCTCTA AATAAAAAAG AGTGTCCTCC TAAGATGCTC TGCGAAATAT  
TGTTAGACTGG TGTCTCTCTT GGATGATGTT TGCGTTCAGC ATTCACCAAA TAACTTGCT CTCTGGGAAA AAAAAAAAAA  
TAATAAATAA AATAAACAGT AAGAAACACC CATAAANCAA ATTTCTATGC TCCTGCAGCC TCTTTTGGCC TGAGCAAGTG  
GGACCTTGGT ATACACATCA CCTGTNCTIN CCCTTTTCTT TGAAATGTGG TGTTTGCTGT TAAATTGGGA TTGAA

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTCAGG AACCTGGTCT TAGCTCCITG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT  
TCTCCAAAAG CAAAACACGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTTCAGGAC CAGGTGGTAT  
GCCGTNCTG AAAGTGAGAC ACATGCCCCA GGGAAAGGGT AATTTTAAAA TTCTTCCCAT AGGTCTCAT CCTGTTCCTC  
TGCTATGTCC AGCATCTTIN AGTCCAGCT GCAGGCGCTA TATTTAAATA CCTCATGCT TTATCGCTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAAG CAAGTNATTT TNAATCCAC GAAAGATGCC TACCTTGGNT CCTNCTCTGG TCCTTATTAG CCACACCTCT  
CTTGACAGGC AGAGGAGTTA GGAGTGAGGG GATATTCCCA CCAAGACCCT ACAAATTGCA CTCTTAGGCC ATGCCCTGGG  
TACCCAACT CTAGAATTCC CTCCTCAAAG GGACCTTAAC CCAACTTCAG AGCCTATATA GGCCAATTCC TTGGTCCATT  
TTCCAAGGGG TGGNCAAAG ACAACCATTT TNGGGAGGGN GANGGGAGTA GGATGAAGCT TTGNCACGT GGGTCTTGGG  
CAAATCCAC ATATCCCGGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TTTTITGAA ATGGAGTCTC GCTCTGTNNC CCAGGCTGGA TTGCAATTNC NCGATCTCAA CCCACTGCAA  
CCTCCGCTC CGGGGTTCGA GCGATTCTCC TGCTCANCC TCCTGAGTAG CTGGGACTAC AGGTGCGCGC CACCATGCCC  
AACTAATTTT GGTATTTTGA GAGACAGGGT TTCTCCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

SEQ ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATGCTTGG CTCAGGGCCT GGGGCGGGT CCTGGGTAGA GTCTAGCCC CAGAGCCCCA GCCCCTCATG TCCTGCGGCC  
CCTCACTGAC CAGACGATGA TCGGNAACCT CTTGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATTNCCAA  
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGGT TCACATGGTA  
CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGC GCGG TTGTTGAGT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GGTCAAATA TGCAATTTAA AAATAAATAT ATCCATTINC CTATTCTTAC ATTTATGAAT  
ATAAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT

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TANITTTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT  
CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATTGNA AACACAGTTA CAGTGTCTTT CCA

SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTTCT TCTCATCTTT TINATGCTAT TATTGTCATA TAAGTTACAT TCCTATACAT TGTGTGTCCA ACACAAATTT  
AAAATTATGC CATGTGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTTG  
CCTATGCAGT TACCITTTACC AGTGTTCCTT ATTTCTNCAT GTGGATCTGA GTTACTGTCT TTNAACTTCA ATCTAAAGNN  
CTTTCAGTCT GAAAGACTGT AATTTNAATT TCTNGTAGGG GTAGGTAAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEQ ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTTG GCCAAGGCCA TCCGGAGACT TGTCTGTCTG  
GGTCATTTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA  
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTITNCAGT  
GGGGCTGTTC CCATGGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA  
CAAGTT

SEQ ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTGCTGA AAAAAACAAC AACATTGCTT TACAGTGTGA TTCCAGTTAC AGAGAATATT  
CACATAGGTG CATAAATAAA TGAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TTTTTNCTA  
CTTTTNAITT TINATAATTC CTCAGTGTG TTGGTGTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA  
AACCCCCCAA ATCTAGTGGG TTAACACAAA ACCATCTTAC AATTTTNNTC AGAACTGTCT AAGGCTGGAT ATTTTACTGG  
GCTCTCTCTT GAATGTGGGG G

SEQ ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTTNTTA CCCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA  
TTTAGAACCT ATTGCAAAAC TGGGCCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG  
AAACCCCTTCA ACCTCAACTA TGCCCTTCATA GACACACAG TTCTATGCACA TGTAGGCACA TGTACCATCT CACATCTTTC  
ACTTTCCCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEQ ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAAATAGC CAGACTGGGT ATTATGCATG TAACAAATGA GGACATTGTG CATAAGAAAG GAAACATTAG TTTTCTGTCA  
TCTTGGGCCA AGTACCTCAT TACAGTAAAT GTGTGTCTTT GGAAACTCTT TGCTTGTNCT GATGGCGGTA AGCATGGGGT  
CCCAGGCAGG TTCAAAGGCT GAACTGTAAG AAATGGGCAA GACAATACAT TTTGTTTTGG AAGGAATTTT TCATGGGATA  
AGTTTCCCAA AGCTTGAATT ACAGGCTATG AAATAAAGCA AATAGATGGA GGAGAAAACA AGTATTGTTT TCAAAAAGGT  
ACCAAGTCAA TTCTATTTAA AGGA

SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTTCITTTATC TTCTCTCTCT TATGTGCACT ATGTAATGTC CTCATCATTT TAAAAGTGAG TTGCTATTGG GCGGGCGGG  
TGGCTCACGC CTGTAATCCC AGAAGTTTGG GAGGCCAAGG TTGGTGGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCTG  
GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC  
AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC AGGGAGGCGG AGGGTINCAG TGAGCCCAAG ATCGTGCCAC  
TGCACTCCAA GCTTTGGGGT GACCAGAANC GAGACTTTCT CAAAACAAAA

SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCTT GGTGGCTCAC CTCTAATCCC AGCACTTTGG GAGGCCAAGG TGGGAGGATT  
GCTTGAGCCC AGGAATTINA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCGGG CGTGGTGGGG  
CATGCCGTGA GTCCACGCTA CTGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGGA CGTGGAGGTG GCAGTAAGCT  
GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCCGTGTAT CAAACAAAA CAAAAACAA AAACCTGCCT  
TCINGGATT GGGCTTCTGG GTTTTT

SEQ ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTTGAGCA CACGCGTACA CCCAGACATC TTCGGGCTGC TATTGGATTG ACTTTGAAGG TTCTGTGTGG  
GTGCGCGTGG CTGCATGTTT GANTCAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAAA GATTATGTGT GTTATTTTTT  
TTTTTCTCTC TCTCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CTGATCGGGT CTTCTTCAT CAGGAACGAA  
TGCAGGAATT TGGGAAGTGA GCTGTGCAAG TCCTGAAGAA GGAGATTGTG TT

SEQ ID NO:1206: (Length of Sequence = 336 Nucleotides)

TTGCCAACAC AGTGTGTCAT GTTATTGGG CTATTCACAG GTAAGCTTAA AATACAATGA AAAGAAAAGA CCAGACGTCA  
TCAGGAATGT CGAGAAACAA AATATTTAGC ATTCTTAGT TTCAAATGTT ACCATTTCAT TGCAGCTGAG GAATATAGGC  
CATTCGTGA CATAACTGCA ATGGGTGAGA CTTATTTTGA GCCACAGGAA GCAAATACAT TTAACCAATG ACTTTTAGGA  
CAGGAAGCAA AAAAGAAAAC AATATTTTCA TGTAGCAAGG ACAAGANAAT CATTTATACA AATTAAAGTG GATATTAAAA  
TACCATTATA AAGAGG

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TGCCTCANCC TCAGAGTAA CTGGGATTAC AGGCGCCCGC CGCCACGCCT GGCTAATTTT TGTATTTTGA GTAGAGATGG  
GATTTTINCA TGTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGCTGGG  
ATTACAGGCA TGAGCCACTG CGCCTGCCTC CATTTCTTTT TTATAATTCA TCCTGAACT CCCTTAAGGT AGAGAAGCTG  
TTTGATGTC CCAGCCCTG GGAGGCTGAA AGGTAACTTN ACCAGCTCCA TGCTGAGTT TAGCACCTGC TGTGCCAGG

SEQ ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGTTTA AAAATGAAGT GGAAGTTTTT TGTTTTGTG TTGTTTTTGC AGAAAAAGA TTTTAAATGG CTGAATGTN  
CTGCCATAGT TGGCTCAGAT TGTGAGAAA TTATGTTGTA CATCTGAGAG AGAAAAGAAG AGCCTTTTGA GGAGCTGCGC  
TAAATATTAT TTTGTTTAG TCTCTTAAT CTTTGGCTTG AATGAGTCAT TGACTTTCTT TGCCAAGATA GGGTTAGCAT  
TTGTTTTGIG TTTTAAAGC AGGCCAAGGG ATGCCACGA GGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTTCTAGA  
AATGTGTTT ACCAGTTGTT TTAGTCTGAA TGTGATT

SEQ ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCCAAAG AAATCAGACA AAGTAAATTT TATGAGACA GACAGAAATG CACCTACTCA GGACTACAGT  
TAAGCATTTA CTATTACCA AAGAGTTGTG TTCACATTCC AGATAAGTCT ACGTGGAAAA GCATTACAGAA TTTACTAGGT  
TTTINCTACA TCACTATTTC ATCTACAATA GGGACAACAA ACTGACACTC AGGATTGAT GGGCTCTCAT TACAATGCTA  
TACATTTAAC AGGNCNAAC ATCAGTGAAT TTGAGGAAAA AGTTATAAAA NGACCAAAAC CACCCACTGT AGGATGGGCT  
CTTGATGTT ACTGTACAGC GTGGGTCAAG GTAACAAGGA GG

SEQ ID NO:1210: (Length of Sequence = 349 Nucleotides)

GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGGAGAGC TGCTCTTTT GCCGCAGCTA CCACTTCCCC  
TACTCCCAGA ACTACAAGAG GTCGTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG  
CACCAGTCCA GAAAGCTAAG TGTGAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCCA GGGTATTTAA CACTCGCTGG  
TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG  
TGAGCTGTCC CTTACCAGC AACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTCAGG GAAGAGCTTT ATTGCTTCCA TGGGGTGGC CTGGGACGGC TGCCACAGCT TGGTAAGCT  
CCTTGGGCTT CANITCCCTT TGTCCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGTNT TGTGTGTGAA ACCTAGAACA  
TGTGGCAAGT TGGTGAGTCC GGGCCTGCGG TAGTCCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC  
GGANTGGGCG TCACCCTCCT GAGCTTTAAA GTTCTTCTG CTATAGCCCT GGGCGGTCT TGTGGCTCC GAAGGAATGG  
GCTCCAGGT TCCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TGGTATTTT ACCATCTCT CTGAAAATAA ATACTTTGAC TTGCACTGAT TACTACTTCA TCAGCATTCA  
ACTCCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAGCA TTCTAAAAAT AAATTCTATT GGTAAATTAG  
GATATCAGAT GCTTCCATTA TAAAAGCCTA TCCTATCTG TACTCTCAGT TGGCAGTCAT ATCCAGATCT CAAGCTACTC  
TGGCTCTTAT TGAACAAGAA CCTATTCCAG GNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA  
GAGGCAGAAT TGCCACATA CTCTNGCAGG AGTTAAATAA CAAT

SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTG TATTTTAST AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAA CTCTGACCT CGGATGATCC  
ACCGCCTCG GCCTCCCAA GTTGTGGAT TATAGGCATG AGCCACIGTG CCCGGTACT TTTTCTTTT TTAACACT  
GAAATGCTG TATCTACCAC ATTAACATTT TATTTAAAAA AATTGTGTA ATAGCATATG TATGTAAATT TAATATTAAT  
ATACCTCTTT TTTTGTCTT CTTTAGGTGG TTGAGCCTA GGGATACTTA CTTACTGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATTTTNC AGACAGGTTT ACATGTAAAA GGCTAGGTAT TTAGCCACCT CAGCATTGAT TAGTTTGGG TGTCTAAGCT  
CTGTACACA TGGCTTCCA TGGCTTCACT CTACAAACA TATTNCAAC GTGAAGGNTA CATCTACAAG AAATCTACAT  
TTCAAGGGTT TTACAAATCA ATCTGTATC TTTCCCTGA ATTGACTCTC ACAGACCCCG TCCCCTGTIN ATTNCCTTTG  
CCCAGCTTAA CGGTCCAAAG TCTACTTAAA TGCAGCTCAA AAATGTAAAG ATTGGSCAAC AGATTACAG TTCTGT

SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGTATT AAACAATAT TCTGTACTT GANTTAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAATCCCA  
ACACTTTGCT AGGGTTAAGT GAGAGGTCA GCCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA  
CAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGCACTIN CTTGGNCCC AGCTCCTCGG GAGGCTGAGG CTGGAGNTC  
ACTTGGGCCC AGAAGGTCAA GGCTACAGTG AACCTT

SEQ ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCCTGCTCT TGCAATTACC TCCCAGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTTGTGA  
TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTTCTACTGC CAGTGTATGA CTCTCTCTT TGTAAATGTC  
ATATGTAGG TCTGTACAC AGGACATTTT CTTCAATTGA GTTCTCAGA TGCATTGAGC TCTCTGAAT GACTTAGCGG



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GGAAGCTCAG TTGCAGCTGA CGTATTAAAG GGTCTCTCC CATGTGCTG TGCCCGCTCG TTAGCGTAGG ATTCTGCCC  
CACGGCCCTT CCGTCTTCT AAGGGCTGG CTTT

SEQ ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCCAGCT TTGCTTGTT GTAAACAGCT GGCAGTGGTT ACATCTATAT TIGTTAAGAG GCAGAGCACT GTATTTTG  
TAAGATAAGG TGCTAGCTT GCCAGGCTG CCAAGCTGGG GCINTTTAAA ATAAAGTTT TAAAGAAAA TTATAGCATA  
ATAAATTACA CAATTTTATT GGAAACTGA AGGTGTTCAA CCAATGCTAG TTTTAAATA TATTAGAAA TACTATTCA  
GGAAATTTTA ACTACACTCA TTAGTCTTAT GG

SEQ ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTGCCCAGG CTGCAGTGA CTGTGCAAA CGCGGCTCAC TGCAGCCCCA ATCTCCCACT CTTAAGCAAT CCTCCCCT  
CAGCTCTCG AATAGCTGG ATTACAGTG TGCAGTCCA CCCCCAGTA ATTCCTTAA TTTGTTTAT TTTTAGTGA  
GATGGAGTT CGCTATGTTG TAAAGGCTGG TCTGGAAGT CTGGCCTCAA GCGATCTCC CGCCTTGGCC TCTCAAAGT  
CTGGGGTAC AGACGTGAGC CACCATGCCT GGGCCTGCTC A

SEQ ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTCTCTC CTCTCTCCC TTTATTGGCA CTGCCGGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC  
ATGGAAACGG TTGGGGATCC ACAGGAACGA CATTATACA GGGACATTN TGAAAGCAA GCAAGAATGA NTGCTTCCC  
GATCTCAGAC TGGCTGGATT CAGATCATG TTTTGGCTGG TTCTATTTT AAGGGTAAG CAGTTTGCTA T

SEQ ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGTCATCAG AAACCTACTT TGCTTACAGC CTCATTATG TTTTTGTAT TIGTTAAGAT ATTCGTGTG ATGACATATT  
TTCCTTAAA TTNCTAATT TTCCTGGCA TTGCTTCTT GTGATTGAA AATGTTACGG TAAGTGCTTA GTTTGGAAAC  
TATACGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCCATAA CATAATAAAA TGATGCTTTT TTTAATAAGA  
AGATCATAA CATTTTATTA TGCCCTAAAA GATGAACATT CAAAGTTCAC TTTTCTCTG TTTTGATATG ACGGATATAT  
ATCAGTAAAA TAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC  
AATGTCAAG

SEQ ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCTGAGATA CTTTGCTCTC ATGAATAAAT TAGTTAGTAG AATCTAATTT CTAGATCCTT CATAATGGTA ATTGAGGGTA  
AAAAATAATA ATGTAGTAGT CAATTTTAGC CCTTTAAACC TATGGGAAC TGTATGAATA ACTGTTTGA ACTGCAGGGT  
AATCCTGTCA CACTTGCAA CACATAGAAG CAACAAGACT ATTTCTCTC ACATTTTAA TTAATAAGT GCCTGAGTAG  
ACTTCCAGGG TAAGGTCAG AAATTNCTT TCTAATTTCC CTGTTTAAAT GACCACTACT TTAAAGCTA TGCTGGGAAT  
TCATTTTAC ATATATCTAA CTTACAGGAA ATTTTGAAG AGCCTAAATG TCTATGGGTA GATTCAATGT TTCCTT

SEQ ID NO:1222: (Length of Sequence = 350 Nucleotides)

GTATTTMTT CIGGGTACTC TTCATGGCCT GCTAGAGAAC TTTACTAAAT TATAGTCCAG TAGCTGGACA GAGCTGCATG  
TGTATGTCT AAGTCCACCT GTGCTGCTGG TCAAGATTAT TTGCACTGT TTGGTGGTGT TGAAGAGGAA TACTGTTGTG  
AAGGCTGAGT CAACTGCATG ACAATNCTCA TGGCTCACTG GCTGATGAGT TGTGGCATGA CTAGAAAGCT CTGCTGTAT  
TCCAGATGA CAAGTCACAC CTGAACAGCT GGATACTACT CGCATCCAAT TTGCTTCAA GTTAACATAT TINCAGAAAA  
TATTTGGATT TGGAGTACAT ACAAATATT

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SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANTTTATCT ATAGGCCAAG TTAATGACAT AACTACAAAG AAATGACTTG TTTCACATGT TTTAAACCAG  
 TGTTTTGGCT ATACTAAGCTT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA  
 ATTTTGTAGT TGTAATATTA CTATCGATCA TTTTGTAAGT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT  
 NTTAATGTTG TTAGGAACCA AGGCTATCAG TGTAAATGA AGGAGTTACA AGCATAAGAT TGANAGACGG TAAGTAAAAA  
 GCTCATTAGT ATAGTTCCAA GTTTAACTTG TCAGGGATGA GCTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCCTGACCA AATCAGACTA AATCCTANTA CCTATACCAG AGTTATTGAG AAAGATAAGN TTTGGCCTGC  
 NGGCCTTTGA CAGTGAAAGG NINTAGGCTT TGGAGCTCCT CAGGGCCACT GCTTCAGGA ACCTTGCTGA CAGTGAAGCC  
 AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCAGT NAGTINAGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTIN CCATGGNACT NIGCAACCCA  
 CGGATTAGAA GATCCCACTC AGGAACCCAC GNCACCTGNA CCTAGAATGC CAACCCAGGA GCTGCACAGA TTCTAAACAA  
 CCTCTCANCT GGAATCTGCC TAACCTGCA GAGCTCCTGC GGGGAGGGGT GACCAGTGCC ACANCTGCTG CTGCCTGCTG  
 CCTAAGCCAT TTAA

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CAAAAAGTTA GAAAAACATG TAAACGTAAG TNATGAGGTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCCACA  
 ATTTTCAACT GCCAGATCTC TTGCTTTAGT CTTTTTNCCT TATATTGGA GAAACAGAAG AGTTTGACAT AAAAGTCCCT  
 TTGAGGATGT GAGGGTTGCA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAAGCA ATATTTACAT GTTTTGTAT  
 AAGACCAAAA ATATTTCCCT AAAAAGTTGT TAAAGTTT TTAGTCTAT AAACACTCAC TTTTATAGGG CACATGATTG  
 TCTGTGTGAC TTCTCTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GGCATCTGTT TTTTGTMTG TTTTGAGATA GAGTCTCACT CTGTCGCCAG GCTGGAGTGC AGTGGGCTGA TCTCGGCTCA  
 CTGCAATCTT TGCCCTCCCG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC AAGTAGCTGG GAGGTGTGCA CGCCACCACA  
 CCCCCTAAT TTNGTATTT TTGTAGAGA TGGGGTTTCA CCATATTGGC AAGGATGGTC TCAATTTCTT GCGCTTGTGA  
 ATCCGCCCGC CTCAGCCTCC CCAAGTGCTG GGATTCCAGG CGTGACCAG GCGCCCGGCC GGNATCTGTA GATTTTAAAA  
 GGCCCCAGTG GTTCTNATGC ACACCCCCAG AG

SEQ ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTTTTCCAA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTGT  
 TTGGTCAGCA CGGTCAAAAC TTCAGAAGAA TCTGTGCTC TGAGGCTTTC CAAAGCTTTG TTCCCAGGG CAGTAACAGC  
 TTCCAGTGT GGCAGAGTCT TTAGTATTAT CACCAGGCA GCTGCACTGT GGCTGTAGC CATCTTTCTC TTTTAGTACG  
 ATCCACCTG TCAGACTTCT TGAATTTGCA CTTCAAATTA GAGCCACAAT CAAATTATCA GTCACGNTGT TTATTTTGT  
 CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGA GCCAGGTACT GATCTCTCTT CAGCAGG

SEQ ID NO:1229: (Length of Sequence = 366 Nucleotides)

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CTGATAAGGA GGTAAATTTCA TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCAACAAACC  
 TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG  
 GCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC  
 CTATGTGGTG GACTTCATCA CCCCTGCCAA CTTTINAGAAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC  
 TGATCAATGT TGGGGTCATC TACGAGGTAG CTGAGCGTCT GGGTAT

SEQ ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGTTTGTAG TGTGGGAAAT CGTTTGTCTG GAGCACAAC CTCATTGAC ATGCCATTAT  
 CCACACTGGA GAGAAGCCCT ATAAATGTAG TGAATGTGA AAGGCCCTTCA GTGCGAGCTC GTCCCTCACT CAGCATCAAA  
 GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCTTT  
 CGAGAACTIN TTTTGGGAA GGACTTTTGT AATGTAACTA CTGAGGCAAA TATTTTCCA GAGGTAACAT CTCCTCTGC  
 ATCTGATCAA CCATACCAA GAG

SEQ ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTCGCCGG GCAGCTTGGA GAAGGCGCAA TACTCTCCAG CTCCACCGTT ACTTCAGCAT GGCTGGGGAG GCCTTGGAAA  
 ACTTATAATC ATGGTGGAG AGGAAGCAAA CATGTCTTC TTACATGAC GGCAGGAAG AGAAGTGCTG AGCAAAGGGA  
 GGAAAGCCCC TTATAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT  
 AANITACCTC CCATGGGCTC CTCCTCGCAA GACGTGGAGA TTATGGAAAC TACAACTCAA GATGAGATT NGTGGGGAC  
 ATAGGCAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTTAT ATTACTTTAG GTATATAGCC AGTATTGGGA  
 ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCAGAG GAGAGACTCT TGGACAAAT AAATATTTAA AAGCAGTTC CTATGAGAAA ATGGAAAAAG  
 CCACAAGCAA AGTAAGATC CATGCTCAA AAAGGCCTGA GAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAAGCTT  
 AGAACGAATA CCAAGATAAT AGCAAAATC CTCCTGGAA AAGAGTCAGT CTGCAAAAC CGGAAAAGGA GGTGTGTTTT  
 TCCACAATGC CTAATTTCTA ACAACAACA CAAAACTCA GAAACATGG CCCAATAAGT GGAAGAAAT AAAGTGACGG  
 AAACCTTCCC CGGAGGAAAC ATAAGCTTCA GGCAAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGTTT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGTTCAGT GACTCTGGAT  
 TTGGTTCTAA TTTAATGCA ACTTCTTGAT TGAGTGCAGG GTCAGACTA CTTGGAAGTG GCTTTGGCGT TTCANCGGTG  
 GGTAATGGAG ACATTGCCAA ATTATATTC TGTAAATTTN CGTTGGGTGA GGGGAGCATT ACATCATTAT ATAATGGTAC  
 TTCTCAAGT TGCTGGTCAT CAGTTCTGT GTGTTGCTG CCAAATCTA AAGATATGAT TGTNTCTCA GCGGCTGGGG  
 CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEQ ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCTT TATGTTTGA CTTTTGACT CAACAATTTT TTTAAACTT TTTGTTTTT NCTGAAAGT  
 TCTTGTGTT ATGAGCCCTT TGTGTTGINC TCGTTAAATG CACTCGACCC AAAATTGGTT TGGCATATCG AAAAGGAGAC  
 CAAGGAGGGA GGGGCTGGG CGTGGGAGG GGGGAGGAG CCCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA  
 TAGAGACAGC CAGAAAGACA TGGGAAAGA GTGTTGGAGA CAGAGAAAG GGAAGGCAAG GGAAGCCAA AAG

SEQ ID NO:1235: (Length of Sequence = 386 Nucleotides)

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CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTNCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG  
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGA CTCTCTAAG CTCAGTGCTC TCTCCACTAC  
CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA  
TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTGTAT TTTTAGTAGA  
CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAAT GATCTGCCA CCTTIG

SEQ ID NO:1236: (Length of Sequence = 401 Nucleotides)

AGGATGTACT TCTAGTAATG TCACTGAAAG CAGATATCAA AATTCATTAC CAGGAGTACT TTGCTGTTGA ATGGTTCCTG  
TGCCATACAG AGATAAGATG GAGTCTTTGG AAAGTTGTTT CTTTGCCACT TCTTCTGATT TINTAGTTTG CTCAGTGAAT  
AAATCTAGAT CCCAGATGT TACTGTAGAC AGGGTTGCAG CTGCTGGTGC AGAGGGTGTG CCCTGAGACA AACACCAAAA  
TAAGCTATCA AATTCTGCAT AGTAAAGCGC ANTTAATCCA TTA CTTAAAA TCCAAATAAA GTTATAAAAT TAGATAGGAA  
TCAAACAATT GTAGAAGGTA AAATGGTGCC ATTCAAGAGG ATCACTTACA AGCCAGCCC ATATAAAACC ATCTACAATC  
A

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TAACTCTTT CIN TCTTCA GTCGGATTAT AGAGTTGGAG CAAATGTCAT GATGANCTTT NAGGCCTAGG CCTGNGCTCT  
TGAGGTGTGT GTG GTGTGT GTGTGTGTGT GTGTGTGTGT TTCTTCTCC ATAATAGTCC CAACCCATAA CAGGGGTATG  
GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATTGTATTT GATTAGGATT  
TTTGTGCTGT CTGTATGATG TTTAACCACA CTGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA  
TAAGAGTTTA AATTAATAGT TTNCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAAATT CCAATTATTG TAAATGTAAA AGAAAAGACA ACAAAAATAA GCTAGAAAGA TGAAAGCTAA AAATCTATT  
TGA ACTATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTCATGAAAC AATCATTTAA ATGCTTTTNC CAGGGGAAGT  
GCAGAAGTIG AGACCCTCAA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTCTGCA  
ATTCTCAACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGTTATAACT GGCACTTTAA TTTGTTTTTG GAACTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAATTT AGAAGGGGAA  
TAAGAAATTC CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAGCCT TGCTTTCCTC TTTTLAGAAT TTATTTNCGA  
TTTINAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA  
ATTACTTATG TTTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTTGCTTCT AAGGCCAGTC AGCGAATGTG  
GGGATGAGGC AGGATGTTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GGCAGACAG CAAGACTCCG TCTCAAAAA AAAAGCCTTC CTGCCCAGGT GAAAGCAAGA GTGGTATGGA  
ACATTTATTT AAACATAAGA AGCAGAAGGT TCCTCCTCTT CCAAGTATGT TTTCTCTAAA TGTAGCATTT CCACTGGAGG  
AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTCNA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA  
CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT  
ACTCCAGTCT CAGGCCCTG TTTTAGCGG GAAGTCACAA GGAGG

SEQ ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCTGC NCTGTCTGIN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT  
CCAGCCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCTTGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA  
GGGGAAAGGG AACCGCCCAT ATGTNCTTCA CGTCTGTCAA GGGGGCTGIN TGGTTCCCAT GAAATGGTCA GCAGAGACTT  
TGGGATGGGT ATGACTCGTG GGTACACAGG TTGACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA  
GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEQ ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGTTAAG TATTGAACAG ATATTTAAAA GCTATAAGCT TTAAACAGA ATAGGCATAT TGCTGATACC  
AGTATTGAC AACCGCCTTG TTTTTTCAGA TAAGAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA  
CTTCGTGTA GTGAGGTGAG AGGTACACAC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTCAGTAAA  
CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAACCTGA ATCTAAACAA AACCTATGTT GAACCTTTAAG  
TCTGTAATCT AAGAACTATC AAACCTTAAAC TTGTTACAAA AGGNGGTGAT GAGCACAAAC ACTTTCTTTT GG

SEQ ID NO:1243: (Length of Sequence = 377 Nucleotides)

GTGGGGCAGG CGTGAGGTAG GGGTGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGGNTCC  
CTGGAAGGC ACAGGGCACA GACGGATGCC GCCTTTNITG CTGGGACACT CTGCCACCA TCACAGCTC CCCGCTCACT  
CCAGCTTCTT GTACTTGGTG AACAGGTGT AAAGAACCCT CAGGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA  
CGAGCCTTGG GTTNTNINAG GCCTCCGTCC AGCATCAGCT CAAAGGCGAA GGACACATIN TGGACCTTCT GATCGAAGCT  
TTCCGGAGTC AGGTAGAAGT GGTGGAGAGG AACAAAGTAG TCTTCCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTTTINCAT CAATGTTTAT CAAGGATATT GGCTAAAAAT NCTCTTTTTC AGTTGGGTCT CTGCCAGGCT TTGGTATCAG  
GATGATGCTG GCCTCATAAA ATGAGTTAGG GAGGATCCC TCTTTTINCA TTGATTGGAA TAGTTTCAGA AGGAATGGTA  
CCAGCTCTC CTGTACCTC TGGTAGAATT CGGCTGTGAA TCCATCTGGT CCTGGACTTT TTTTTCGTTG GTAAGCTATT  
GATTATTGCC TCAATTTTCA AGCCTGTGTG AGGTCTATTG AGAGATTCAA CTCTTCTCTG TTTTAGTCTT GG

SEQ ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGCCAGTG CGCAACCAG ATCGGGGCCA AGTCTTGGGA AGTCATCAGT GATGAGCATG  
GCATGACCC CAGCGGCAAC TACGTGGGCG ACTCGGACTT GCAGCTGGAG CGGATCAGCG TCTACTACAA CGAGGCCTCT  
TCTCACAAGT ACGTGCCCTG AGCCATTCTG GTGGACCTGG AACCGGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG  
ACATCTCTTC AGGCCTGACA ATTTATCTTT TGGTCAGAGT NGGGCCGGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEQ ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTTT TTTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAAATAT AAACACAAAC CAGTAAAAAA  
CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC  
GAGGCCATAA ATACTGCAGG AGGGCGGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTGCGCAGCG AGATGGCTCC  
GGGGGTTTAG ACACTGCTGG CTTCGGCCCC GGCCG

SEQ ID NO:1247: (Length of Sequence = 384 Nucleotides)

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GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAACTTTTG GACCTGCAGC CCTTGCCCGT NTCTGCTCTG AGAAACAGTG  
 CCTTINAGAG TCTTTACCAA GATAAATTTC CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAGT  
 GACGACAACG TGTITGTTGG GGGCCCCACG GGCAGCGGGA AGACTATTIG TGCAGAGTTT GCCATCCTGC GAATGCTNGC  
 TGCAGAGCTC GGAGGGNCGC TGTGTGTACA TCACCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA  
 GAAGTINCAG GACAGGNTCA ACAAGAAGGT GGTACTNCTG GACAGNCGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AATTGGAGA AGATAGAAGT TTGAAGTGA AACTGGAAG ACAGAAGCAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA  
 GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAA  
 GACAAGCTAG GAAACAAAA GCTAAGGGCA AAATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

SEQ ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CTATAATGGA CAGAAATATG AGAATGAATA AGCAAAGATA CITATGTACA CCAATAATAA  
 AGTAAGAAAG GTAAAAAAT TCATGTAATA AGAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA  
 ATTGAATAA CTCACCTATA TAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTTCC  
 CAGAAGANTG TTTATCTCCA CAGCATCCAA CCTAGTGTCA TGCACACAGT TGGGACTCAG CCACTGTGTC CTGATTGATT  
 ATGAAGNCAG TCACTGTGAT CAACCAACA GTAATTGAAC GTTCATTTTT AATANGGTCA GTGTTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TTINATTTAC ACTGCACACC TTGCAGCATC CTTACCTTGC AGAGTACTGA GTCCTGGCTT CATGAATTIN  
 ATGTCAAGTA AATGGGTTTT AGTCATCCCT AGTTCATGTG CATGTNCCGA GAAAAAGGGG AGCTTCTAAA ACATGTGCGC  
 AAACACAGG AAACAGTGCA ATCCTGTGTG TCTCCTATTC CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTGG  
 TGGCTTTCTG GCTTACAAGT TCCAGTGCTT ACTCCCATTC CCTCAGAGGT TTGCTGTGAT CACTGAGGGG AAGCAGAATG  
 GAGCATCGTG TGGTCCTTAC TGGAGGACTC CTTGCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCAAA T

SEQ ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GGCTTCTCGC AAAGGAAGGC ACTGCCTCTN CACACCTTGT GAAACCTTTC CAGGACCTCC  
 CAGTCAGAGG CCGTCTGGTT CTCATGTCTT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG  
 TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTTNTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC  
 AGAGGCTCAT ACAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTAGGN TTCTTGAAGA CAGGCACCAN GTTTTGTCT

SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAACA AAACAGTTA TGCAAAAACA AGAGTACAAA ATGCCCTTTT CTGAAGCTCA GTTTGAGAAA CTGATTTGCG  
 ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTGATGANC  
 TGAAATCATC TTCGTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTACAG AGATAAACA  
 GTGCCTCGGA AACATAATTC ACCCATGTAT ATATAATANT TTINGAACAT ACTTTTAA AATAAATCA CAGTCAAGGC  
 AGTGATAGCA TTGCATACTC AGTGCATTAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

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TTGCTTTCAA GACAACACTC AGTTGCTAAA CCCATTTCCT TTTCCTTAGG ATATTTTCAT TGTCCTCGAA TTTTAGAGCT  
 GAAAAGTGCC TTAGAGATCA TCTAGTTCAA CCTCTCCGTT CAAATGGAGA ACCTGAGCCA CTAAGNTCA CAGGNGAGTA  
 AGATAATTGA GCAAACAACT CCAAGTAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAATT TACTATGTTG  
 TTAGCATCCT AAGTATGAGT TTAGAAAAGG TAGAAGTTAT AAGAAAAGTT AAATTGTTTT AATATGAATG GGATTCCACT  
 GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCITTA GGTATTATAG TTAAACGAAT ATGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAAGCAAG GAGATGAGTT GAAAGACAGT TTTTNCITTA GTTCATCAGTA TGGGATGTCA GCAGAACAAA AATTAAAAAG  
 ATTAATTTC CTTTGTGATCT AAAACTTCCT TAGTTTGAGC AGTAGGTGCT ACAAATTTAT TTACATATCT TAGTATCATA  
 GTTAAATGTA ATGTGTTTAG GAGAGGAAAA CAAAAGATAC ATTTTNCITTA AATTCATTA GAAATTTTCA AATTCACITT  
 GTAGCCCATG CTGNATAGAA TTGGGCTGTG TTGGTACATT TGAAACACTG TTTATGTGTC TTGAAACACT TATTNTTTA  
 ATCGCCGATG TGATGATGCC TATGGCCGAG ATCANATATA GCTAGATTGG CTAGGCT

SEQ ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGTTA GCTTCTCTG GCCTAGAAAA AGAATAGGNT CATCAAGTCA TAAACGAAG TATGTAATTT CAGCACCTCC  
 ACAAATGGC TTCATCAAAG AAGAGAATCC CATCATGTGT TACCTCTCCT CTCTAGGTTT TTCAGCTGGG GCTTTGCTG  
 CCCCTCTACC TATGGCAGAA CCCACTGACT CGTGGNCTTT CCAGCACTTC CACTTGCTTC CATTAGACAC TTAACCCCGC  
 TGNCCTGTC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTTCTGA GACACCTTCA TGTGACAGGT GTCCACITTT  
 ATGCCTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAATTCAAG  
 ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTTCTA TATGACTATC CATTCTTTAT CAAACTAAA CATAGAAATA  
 TACGATTATC TCAATTTCTG TCTTTGNTTC TGAAGGCTCC TGTGTACAT AAAACTTACA TTAAATAAAT TTGTATGTCT  
 CTCITG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTTNAGA GGGATTCTCA CACAGTCACC CAGGCTGGAG TNCAGTGGCG TNATCTTGGT TCACTGCAAC CCCTGCCCTNC  
 NGGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC  
 CTGTTTINAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCGG

SEQ ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGGTTTC TTTCCCTACC CTTTGTGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAT CTGGGCTGAG  
 CCAAAGTCCC TTTTGGAAT ACAAGCCATA ACATTGGAAG GACATCAGCG ACCTTGCTTT GTTTAGGIGA TTTTNCITTC  
 AGCTGCAGGT AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAAGATGC ATTCTTGTG TAGGTGGGNG AGAGCACTTC  
 TAATGTTAAG TGGGGTACAG NTCAGCTGCC CCCCCACGTA GCCTGGACAT CGTCTTNTCC CCATAATCCT TNCATCCCT  
 ACAAGGTCC

SEQ ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGTCATATGT TACATGCATG TTTGTCNAAT ATGTGTATGT CAGGNCCATC TTCACAAATT TNCATAGCCC CTCTGTGAT  
 CTGTTAAATA GGTATATTTA GCCAACCCCTC TCAGCATAAA GCTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCTGCATC

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TGCTCTTGGC TGGGAGCTCG CTCCAGCC TGTAGGATGG CCACCTTGAA GGCTGTAACC CTTTGAAGA AATAAAGTCT  
CCTTTTCTAA ATTTATAGAT TGTATGATTG TTTTAAGCTA ACAATAGCAA TGGCATTATC ACCTCACTTT CTGTGTGTGT  
GCTTAGCATA GTACCTGACA CATGGCATT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTATAGCG TTCCCTTGAT  
TGCNCTATGA AACTGAGTAA AGTTTCATTT CCTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA  
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTT TGTATATCT CACCAACAAT CTGGTTTCT  
ACAGTACATC AATTTTAAAGT AATGTGCCAA ATCATGGCAG CAAAATATG TTCCCTCTAG CTGTAGGGA CTTTGACTTG  
NAAAACAGGN GTTCAAATC ATCTTCTTCA TTT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAACAGA CAGCTAAGAT TATAGGAATA TTTAAATAA ACAGCATTTA TTTTAGACAC ATTCAAATA GAAGCCACAA  
TAATCAAATA GATAATTATCT GAAAACGTTT CAAAATATT AACCTTTTAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT  
TAACAAATTA TTCTGAATTA TTGTGTCAAC ATATAAGGTT ATGCATATAT ATNCACCTGC TGGTCTCTAT GTTAAAGCAA  
ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAACAATT TACG

SEQ ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACCTAGA AGTGAAGGAA TGCCAATGGT TGCCAGCAA GCACCAGAAA CTAGGGAGAA  
ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CTGCGCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAC  
TATGAGACAA TAAATNCTG TTGTCTTAGA CCACCCAGTT TGTGGAATTT TTTTACAGCA GAACTAGGNA ACAAATACAG  
TTTTTTTTTG CAGTAAAGAA GTTTAAATC TGGGTTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGTTGAGGTT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCTTACCCCT CAGCTTTAGT GGAATTCGT GAAACACCTG  
GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTGTAGGT GGCTCTGAAC  
CTAATATTTC CCCAAGATT CCAAGTGGT AGGAAGGAGG GGGTGCAGAG GGATATTAAT CATGGTCATT AAGTCTCAA  
ACATTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG  
GAGCAGCTGC GTACCATCTT CGGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCC TGGAGCAGAG  
GTTCAACGCG GAGCGCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNTGAG AGCATCAAGC CGACTTNCAG ATCTACTCGG  
AGTACTGCAA TAACCACCCC AACGCCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CTT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTTTTT TTAGCCGAG AAACGTGTG ACCGGGGCCT  
CAGGTGGTGG GCATTGGGG CTCTCTTGC AGATGCCCAT TGGCATCACC GGTGCAGCCA TTGGTGGCAG CGGTACCG  
TCCTTTNTG TTCAACATAG GTTAGGTGGC AGCCACGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTTNT  
NTTCAGGAG CATNTGGTTC TTTGGCGGGA CCCACGCAGC CCTGAGGATT

SEQ ID NO:1266: (Length of Sequence = 322 Nucleotides)



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CGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTCT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA  
 TGCCACCATC CACGTAGCGC ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA  
 TTGGCCCTGGA TGAGCTCGTC CTGGAGTTN AAGTGGGATA TAATGACATT NTCGCCGTCT GACACGCGGG TCAGGGAGAT  
 GCCCAGGCGC CCACTGGCAT GCTCATGGCT ATCAGCAGGC AGGACCTTNA GCAGGAAACT CGGGATGATC TTTTACCAGG  
 TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCTATGTA TTCTTGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCCCAACATC  
 GATAGTAAGG GAGTCAGGT TTCTTCATCT TCCCTAGAGT TAGAACTCAC TTCTACAGCC ACTGTGTGAG GGACCACCTT  
 GAGCGCCCTT GGCACCTGCT GGCTGGAAAT CAATTTAGCT GTAATGGATC TGGCCAGCT TTTCTCTCT TGGGTCTCT  
 GCACTCATAG TGGTTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATGG TCCCTTTCTC CTCTCTCATTT

SEQ ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATGTA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGTT ATTCATAAGG  
 AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTCGGGT GCACATGTGC AGCAGCTGTA CCTGCTTGCT  
 TGTATGTAC ATGTCTCATT AACATCIGAA ATCTCCACCC GGGAGTGTGT TTTTINACTAT TATAATGAGC AAAGGTTGAG  
 TCTGAGGACA GGTAAATCA AAAATGTGCA CCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA  
 CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTTAGG GTCTGCAGCA TGTGTGTAAG GCCATTAAGC ATATGTTAAG GCCATTAAGA GCAGTAATT  
 TAAAAGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACCTCAAA ATTATGAAAG TTTCAGGTCA TTATTTTGCT  
 ACAATGANC TTAGCAGCTA AGNAAAATGT CTGCTGCTT ATAACTAAA TATGGTATAA TTATATATTN CTNTTATGTA  
 TTTCTAAAGC TACATTTTCA CCTTAACCTT ACTACAAAGT AGTTTCGGGA AACAAAGTAA AAGCAGGGGN AATCCAACCT  
 CAAATATAAT CAAATATAT

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GATAAGTGAG ACTAATGGAA TGTTTCCCT CTAACCTCAT AAAAAGTTTA AGGATTATCT TTCTTGAGTT CTCTGTATTT  
 CTGTTTITAGA AGAAAAGAAC AAAATTTTCA AAACAAGATT ATAGTGCTTT TNCATAAGTA TAAATACGTG GGCCCTATAC  
 AAACCTGGCA ATTCAITAGT CTTAAAGCAG ACATCCAAGC TATTGTGGGT GTTGGATGA CACCATTTTC ACAGTAGGAA  
 ATCATTTTCA TCTGAGCGTG GGAATCGGCA TTGGTTAAGC CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG  
 AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEQ ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCTCTGG CTGTGTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT  
 ACTGATATTA ATCAGTTTAG TTGGATTAG ATGAACAATG TTTAATGCTT TAAGGNTCAT TTTTGGCCC AACAGGACTG  
 TGCTATATTA AATGACACCG TGCCCAAAAG CTCAAAAATT ACATAGAAAG TAAAGTACTT CTGGAATACT AAAACAGTTA  
 AGCATAAAAG GTGTGTAATT GGTCCCAAAG TGATATTAACT TAAACATTT AATCCTACGN NCTATCTTAG CTGTACCCCT  
 TAAAAATGCT TAGGA

SEQ ID NO:1272: (Length of Sequence = 323 Nucleotides)

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GTTTGTAGATA TTTTAAGATA TTTAACTGTC CCCTGTGGCT TTTAAGGAAA AAATAAGTAT AAATNCTTGA ATATTAAGAN  
 TTTTAAATCA GCTAAATTC A GGGCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA  
 GTTTCAAATA TGCCAGTACG TAGGGTATTT NTGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACTNATC AATGGAATTT  
 AAATCTATAG CACTTTAAGG CTGTGGAGCC CAACANTAGG GGNTACTTTG GGGGCACATG ATCTTTTCAA ACATAAATTA  
 GGG

SEQ ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAAGCG AAACCCTGAC TCAAAAAAAA AAAAAAAAAA AAAGTCTCTT AATCACAACA GCAAAGCTCC  
 AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GGNCAGCACA GACACAGAAC GTTTCACA CAACACACAG  
 TTCTANTGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCCTCATCCC TCTGTNGTCC  
 CCTGTTACAA GCTTAGANCC CCCTCCNNAC GCTCCTCCCC CATAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC  
 AGGGGGCAAA T

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GCAATGGGAT CTGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA  
 CTCACCTCTT TTAGCCTTTT GGTCTTTTAT GTGTAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC  
 AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA  
 TGTMTTGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCCTCTGCAC ATATCATGTT TCAGCCTAGT ACAAGGCAGC  
 CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TTGCAGAAIT TTGGTTAATT GTGAAGCTGA AATATCCTGA CTCTACCTCA AAGTTAATGT TTTAGGTAAC  
 TGAACAGGTA TTCTNCCCAT TACTAGTATT GAAGTCAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA  
 GCCAAAAAGT ACACAAAATG GACGCCATAA ATNCTGAAAT AAAAGTGTAT GATGTGTCTT GAGTCACTGT AGAAGTCATG  
 CATTTAATTAT CAAGATAGAA AAGAGCAGAG AATGACGTGG GACATTGGTC CTCGGAGGGC TTCGTANGTG GTTCGGTCC

SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATTGGG CAGGACAAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG  
 CTGGAGTGGG GGCTTGGGGA AATATTGACT TCCAGGACCC AGGGCTTGAG GTTTTCNTCT AGCATGATGT CAAAACCAAA  
 GAGTTCATGG CAGCTATAGG GCCGTGCGAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT  
 TGACAACAAC ATCCTTTATC TTCTCCCAGA TGGCGTCGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC  
 TTCA

SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG  
 CTTTCTGGAA AGCAGTCACA GCGGAATTTT TGGCCATGCT TATTTTNNIN CTCCTCAGCC TGGGATCCAC CATCAACTGG  
 GGTGGAACAG AAAAGCCTTT ACCGGTCGAC ATGGTTCINA TCTCCCTTTG CTTTGGACTC AGCATTGCAA CCATGGTGCA  
 GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG  
 CCAAGTCTGT CTTCTACATC GCAGCCCACT GCCTGGGGGC CATCATTTNG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)

315

GGACTTGTAC CCTGGGTGGT GAGAAGACCC TGATTGGTTT TATTAGTGCA TTTCIGTAAG TNACTGGGAT AATCATGTTT  
 AGTTCAGCAT TTTATGTGAG TTTCIGAAAG CNCTTTAATC AACTCCATAG ACAAGATTAT AGTGTTCAC AGCAATAGGC  
 ATGGGCCATG TCTGCACTGG AGGTAAGTTG CAAGGTACAC CCACGGGTGA TTTATCACTC TTACAAAGAT GATAACTAAT  
 GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGTTTAC AGAGCATTTT TAATCATCAT ACTTAGATTT ATATTAAATAT  
 TTCTTTTCAA ACTAAATTAT TCCAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACITCAGT GCTTCTGTGT CCCGAAAAGA TCTTTTGACG CATAGGGCCT AACTGTAATA CACTTAAAGG ATAAGTCTCC  
 ACCCCAAGGT GAACATGGGT CATGTGTAC ACGCACATTA GTTCATTATC CATGTGTGAG GACCTCCTTT GTGAACAGTC  
 ACAGCTCCTC CTATAACCTG TTAAATATGT ATGTTTGATC AACCCATTCA ACTTAAATNC TTGTCTTACC TCTCCTTCCC  
 TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCCAGG ATGGAACCCT TTGTAAGAAA TAAAGTCTCC  
 TTTCCAAATG TACACATGT ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCTTAGCA TGCTGINIT ACTGAGACCA TAAACTTTTT TTTTTCTCT CTGCCTTCAC CCAGTGTGTG TTAAGTCTTG  
 CTGTGTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAACAG ATATGCAGGT  
 GGTGGTTGTT AACCAGACAG GATTTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTTNTGT ATGINTTTTA TGTTCATAGT  
 TTTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTATTTTGAA AGAATGAGGC TCTGAAAAT  
 AAACATGCCC AGTAACTAT ATCT

SEQ ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAAAGTA ATAAAATCAG TACAATCACT AACTTTCCTT TGTACATATT ATTTGTCAGT  
 ATAGATGAAT ATTACTAATC AGTTTGATTA TNCTCAGAGG GTGCTGCTCT TTAATGAAA TGAAAATTAT AGCTAATGTT  
 TTCCCTCAA ACTCTGCTTT CTGTAACCA TCACTGTTTT AATGTTTGTG TGTCCTTCAT AAAATTTAAA TACAATTCGN  
 TATTCTGTTT CCAATGTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA  
 GTATTTTAA A

SEQ ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGTCAAA TGTAGTTTAC AAAGGGAAAG GACAAGTACC TTINTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC  
 CCACGGGAGG GTCGGGGAGA CGACACTTTT TCCCTGGGAA AGGCAGCTCT AATCCCAGGA ATGTTTCTCN GCAGAGGCTG  
 GGTGGCCAGG AGCACTGTCC TCTAGCCCC TAACTCAGCC TCTGCTTCAN CTCGGTTCCC ATTTCTCTGCC TCTACCCCC  
 AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCAT

SEQ ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TMTACCCAC ACAGCTCCCC CATACCCATA ATCTTTATTT ATTINCTTCG TTCTTCTCTT  
 ATACCTTGTG TCAGGCATTA AACCAATACC TGTATTATAT NCTATCCTTT TCAAAACAGG TGTGGACCAT GCACAGATGA  
 CCTATGACGG GCAGCACTGG CACGCCACGG AAGCCTGCTT TMTTGTGCC CAGTGTAAAG CCTCTTTNTT GGGATGTCCC  
 TTCTTCCCA AACAGGGTCA GATTTACTGC TCAAAACGT GCAGTCTTTG GGTGAAGACG TCCATGGCCT CTGAATCTT  
 CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

316

TTTTTTCACA AGGTGAAAGA CCTTTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG  
 GTTCACATTC AGTTATGTTA GTCCCAAACC TACAAATTCA ACATGATCCC TATTAAAATC CTACCAATAT AGTTCAAAAG  
 CTTGACAAGT TGATTGTNAC ATTTATATGA GAGANTAAAT AAAAAAAAAA AAAATAGGGC CAGGTGCAGT GGCTCACGCC  
 TGTATCCCA GCACTTTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCTNATG ATGTAGAGGC CAAAATGGTA TTTNATAAAG AGGAAATTAC TTCTGANCCA CCCAGCTGG AACACTGGT  
 AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC  
 TGCCCTGTGA GACAGCCTGA AAGTTTTTIN CAGATTTTNT GTGAACACTG TCTGAATTCA CATTTGGCAA AATGATTCTN  
 CCAGTTTCTC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT  
 AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTTG TACAAAGTGT GCATGINAGC GTGCGTGTGT GTNITGCATT TTTCCCCCTT TAGGTGGTTC AAATTTGGAA  
 TTTGTGAAGG CAGAGCTGAT AATTAGAGAC AATAAAAATC TCAGAGTAG ATGGTTCCAC AAACAAGACT ATGAAAGAGG  
 GGATAAAGA AGAGGTCAAG AAAGACTCAA GAACAGTATA TAGAAATAAT TCAATTACAT TATGTGTATT TTAAGAAAAA  
 CATGTTCAAA CTGCATGAGA CAGAAAATAG CACTCNGTTA TCCTCCTAGA CTTCTNAAAG TTTTGAGTTT GTCTGCAATC  
 TTTCTCCATT AATCGNCTTT TGCCATCTTC AGAA

SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTACC CGGTGGCTA TAGCCCCCA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT  
 GATGCCTAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC  
 AGAGGAGGAG CATGGGGGGC CAGATGCAAG GGTGGTGGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGGT  
 AGTGACTCG AAAATGTGGT CCAGCCGCCT TCCAGCAAC CCATCTGGT CCCTGTGAGC CAGTNTGTGC AAGGAGGCCT  
 NCCAGCAGCG GGGGGTACCA GTGTACTATA GCAT

SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTTAAT TGGTATAGAT TGAGNATCAT GCATCANCA GCACTTTTGA AATTNTCCCC AAGTGATTCT NACCTGCAGC  
 CTGGGTAAGA AGTCGCAGG CTCTGGATA GTCATTAAGT GAACTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT  
 ACTAGGTGCC GGAAGTGCAT TTNCTTGCTC ACAAGTAATT TTTTAAATG TATGCTCGCA TCCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GGACACTGTG AGGGGAAAGG ACAATTTTAA AATTCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC  
 ATTACGTGCT TATTTAANCT TAATATCTTG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCAGTATTC  
 TACACTTAAA GACTACTACT ATTTTNATAA AAGGTAATCT ATTCAAATTT CTTACAGAT TTCCCTTGCT GGGGATCAGT  
 TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG  
 TGCCAGGG

SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTTCATGGG TAAATTGCAT GTTCTGCGG CTAATGTGGT TTCTTTTACA GAAAAAGTA  
 TCAGAAATAA TCGGTTAACT TTNCTCACAT GGTCTTAACT CTTCTTCAGG AAATATCTAA CTTGTAAGTG CAATCCTTCT

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TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC  
TCINCTGAT CTTTAGCCTT TCCAGGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEQ ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAAGTTTGG GAGGCCGAGG TGGGCGGTC ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT  
GGAACCCCAT CINTACAAA ATAAAAGCA AGATATGCAA AATAATGTGC CAGTNTGGTG CCGTATACCT TTAGTCCCAG  
TTACTAAGGA AGCAGGGTGT CTNAAACAGA AGAATCACCT GAGCCAGGG AGGTGAGGC TGGCTAAAA TAGATCTGGG  
GGTAGTGTT AATNGGCCT TGTAATNAT TCAGCATAAG GAAGTGTCCA ATATTTTTTT AAGCTGTGAG AAAATCC

SEQ ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAGACAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT  
GCTCACTGG TAAGTAGAAT GCAAATATC CAATATCTGA AAAAAATCCC AAATCCAAA TACTTCTGGT TCCATGCATT  
TTTNCIAAG GATACTCAAC AGGTATTTTA AAAGATCAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA  
AACGAGGATT AAGGNAACA TGTTGGAGGA CTTTITAAAA ATGTGTTAA GGG

SEQ ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTGCCCCAC CATAAGINCC TGGAGAAGGT  
AGGGTATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGT GGTTCACACA TTCAGGTTTC TCTGATTTTN ACAAGCTTTT  
TCCCATAAG ACTGCATTIN CTTTAAAGC TTCTCCTGCA AANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAGT  
AACATACAGA CCGTTTCATT GGGAGGGGCG CCNGAATGNG AGACAAATAA GTCCCTAGTA AATGGCATT

SEQ ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGGCA TCAGGAAAG TAAGGGCCG GAAACCGGC CCTTGAGAA CCCTGCCCAG GGGAGGCCA  
GCCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGG CAGGAGAGC CCAAGAGCT AGGTCAAGCA GCTGGCTCCC  
CTGGGGTTAA ATACATGGGT TTTTGTTTTA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTTTT  
CCTGCATCTT TACTTTTACA TTTGINCTTA GGTGCCTAA AACATTINAA ATACAATAAA ATGAGTGTAG CAAAAATTAT  
TGAAGCT

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CAACCTCTGC CTCCGAGTT CAAGCGATT TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CACGCCAAC  
TAAITTTTTA TTTTAGTAG AGATGGGGT TCTCCGTGTT GGTGAGGCTG GTCTCGAGCT CTCGACCTCA GGTGATTAC  
CCACCTGGC CTCCAAAGT NTGGGATTA CAGGTGTGAG CCACCGCGC AGGCTACTGG TCTCAATTCT TTTGGATACC  
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEQ ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGGAGAG AGAGTATTTG AGCTGGGCTT GATTCCATCG GGTAGTATCT  
GGAAAAAAA AAAAAATCC CAGATGAAAG AATGTACAAA GACATGAGCA TGCAGGGCAC ACTTTGGAAA ATGGNGAAG  
TCTGACAGG CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGG CTTGATTACA NGGCCAAAAC TTTTGGATT  
TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

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GACTTCTTAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCCAG TAAACCCATC AGACTTCGTG  
AGACTTATTC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA  
AACATGTGGG AATTATGGGA GATACAATTC AAGTTAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG  
GCCCT

SEQ ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAGAGCA AACTCCATA TCAAAAAA AAAAAAAAAA GAATTGCTGA CCTTTATGTG  
TTTCTGTTA AGTTCACAAC AGTCATAATT CTGTAAATA CAAGGCAAAA CTGTAGTTTC TGATACTAGT AATATATCTA  
ANTCAGTAAG TAAAAAGGAT GTGTAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTCA AAATCAAAG  
NCAAGTTTCA GTATATATTA TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCINATTGT TGTGTAGITT ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCAGT TTAATGGGAG ATAATTTTCC  
CATGGACGAG GGGATGGGA GGAGGCAGGG GTGGTTTCIG GATGAAACTN TTCCACCTCA GAAGATCATC AGGCATTAGT  
TTCTCATAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GTTCACAATG GCACTCGTGG CATATNCCGT CGACAACCCT  
TTTTTGAGGT TCCATGCTTC CCATTGGCT TT

SEQ ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACTGCAC TCCAGCCTGG GTGACAAGAG TAAACTCCA TCITAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC  
TACATCATAG AATTGTTTTT AGTGTAATAT GTGTGTGTGT ACATTTATGT AATAGTTAAC ATTTAAAGAG CACCTACTTT  
GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT  
CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEQ ID NO:1301 (Length of Sequence = 304 Nucleotides)

GGTTGCGGGT TATGTAAATC CCAAACTTAT GAACAGGAAA TGIGTACAGT GCATGATAGG TTAAATTTTN CTTTATTGTT  
GTCCAACGCA GGTCTTTTGG AGAGAAAAA AGATCACAGT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT  
TGAAAGATAA TAGGATTAGG GAGGTGTTTA TTTTATGGCA TCTTCTCTCA TGGAGTTCTT AGCACTTCGG ACAATTTGTC  
TNTTCCCCAC TTTGTACAGC TGTTATGTGT CATTACCAG CCGCTGTAT TTAACCTGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTTTATTGC CATAAGAAA ACATTTTATA AAATAATATG GTAGACTTCT ACTTCAACAT ATTCACGTAA AAACATCACA  
GTGCAAGAAA GTGATCACA TTAAGCATGA AGACATCAA AGCCAGCCAG TATTTTAACT ACAGAGCAGA ATATTCTTGC  
TGTCCTTCC TAGAAAATGT TGGCACATTC ATTAAGTCT CAGGTTACAA AAATCACTTC GTGTCCACTT CCTGTCTTC  
AATATATTIN CATAACTACA CTGTGTTACA TTAATGCTGG TGGACAAATT AGCTCTATA AAATCTAAAA ACCTTTTCAG  
GTGGGCACAA TGGTT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TGGAGCTGTA TATGGTCCGG AGTTATATGC AGCATCCAGC TTTCAAGCAG ATGNTCCCT AGGCAATGAT GCAGCAGTGC  
CCCTATCAGG AAGAGGGGGT ATCAACACTT ACATTCCCTT AATCATTCCT GGCTTCCCTT ACCCTACTGC AGCCACCAG  
GCAGCGCTT TCAGAGGAGC CCATTTNAGG GGCAGAGGGC GGACAGTATA TGGTGAGTC CGAGCGGTAC CTCCAACAGC  
CATCCCCGCC TATCCAGGTG TGGTTTACCA GGGACGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAACT

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SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTTINC TTCTCTCTC CCTACATATA TTCTAAACCT TCTAAAGTTT TTTNATTTTT TTAAGGATCA CTTTATCATA  
AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGTCTTTTT TTTTCATATT AGCCGAGGIN CTTTGCTACA  
TTTATATGGT AATAAACGCC TTTATTAAAA TAGANTATTA AATTATAAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTC AGGGAAAAA ATTTATAGTA CGTTTTCAAC TTTTTTTTTT TTTCTTTGAA ATGGAGTATG GTCATAAAAA  
GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAAA TTGCCACTTA CTTTGAATTG TTTTACCBA AGGTATCACT  
TTGAATAAAG ATAACTTTCA TTAGACATCT ATCTTTATGT GTTCTGCGCA TCATTTTCAGT GAGATCAGAG GAAAGTTAAA  
TTAGGAACAA TGAAAAGCT TAAGAAATGA ACAATCATCA TGCTTTTGTG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGATTTTT GAAGGCTTGG CTGTGGATGG CCGAGAACCT GCTCGGGGTG TAGGTCTGTG TGTCTGGGGG ACAGTTTCCA  
CATCTGAGCA CACGGACTGG ATTTCTGAAA TGTCAAAGTC TGATGCATCA CTGCCTCGGC GGCTGCTGGC CCTNCTGCCA  
GCTTTGCTTC CAGCTCGACT TCCGTGGTGG CTGGGAGTCT TCTTGGAAATC AGCAAACGTGT GTTGGGACTC TGGCAGNTGC  
AGTTGTTATC AAGCCACTGT CTTCCCCANA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGTAGT GAAGAAAAAG TTATAACAAG TATACATTAC ATTTAACACA CCTAGCACAT AGGACACCCT  
CAACAAACAG CTACAGCTGC TGTAAATCAT GTGTATATAA TATAACATGC AAGCATATCT TCATGTATIG ATTAATTACT  
ACTTCTTGGA AAAGGATCTG AGGAACATAT TTAATATATT TNATATGCCT GCTCATATGT NCATTTAGIG CTTATCAATT  
ATATTTAGIG CTTTCTTATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCGGCCAA CGTGGTCTTC CTCTACATGC TCTGCAGGA TGTATCTCC TCCGAGGTGG GCTCGGNICA CGAGCTCCAG  
GCCGTCTGTC TGACATGCCT GTACCTTCC TACTCCTACA TGGGCAACGA GATCTCCTAC CCGCTCAAGC CCTTCTGGT  
GGAGAGCTGC AAGGAGGCTT TTNGGACCN TTGCCTCTCT GTCATCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG  
CCGACCCACA CTACTTCACA CAGGTCTTCT CCGACCTGAA GAACG

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTTGCC AATATCCTCA ACTCTTTTGC CCACTTTNAT CTTCCATTCA ACCCTCCCTG CAAAATCCTG  
ATCTAAAAGC AACCCAAGTA TTGCTCTCTT CAACCTCCCA GCTGCTGAGT GGTTTTGGGA ATTACACAAC CACTAAGCTT  
GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCCAGTGC TGCCCACTTT CTCCTTCCAT ATTTCTCCAC AGCAGCTGGT  
CAAAATACAT TTNTCCCAA ATGCTTTACA CAACCCCTT CTCTCTTATC ATCCTTANCT CACCCCCACC CCAGTTCTTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTTTTG CTCTGTGCG CCAGTCTGGA GGGCAATGTG CGATTTGAGC TCACTGCAAC CTCTGCCTCC CGGGTTCCAG  
CGATTCTCCT GCCTCAGTAT CCAAGTAGC TGGGATAATA GGCATTGCA ACCATGCCCA GCTAATTTTT GTAGTTTTAG  
CAGAGACGGG GTTTCACCGT GTTGGTCAGG CTGGTCTTGA ATTCTGACC TGTGATCTG CCGGCTCGG CCTCCAAAA  
TGCTGGGATC ACAGGCATGA GCCACGCAC CTGGCCCTAT ATCTGCTTC CTATCTGCTG GGTATGGTG TATGGCTTTT  
ATTTATTTCA ACCTGCAGTT GTTGCAGAA CATCTG

SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGTCCTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT  
CACTTCAGCT GGGGTTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCAGTG TTAGCATTGT  
CATCTGAGAT CACTGCTATT AATATCATCC ATTAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA  
AATCTGTCAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGTGTTTTTC  
TAATTTGGAC C

SEQ ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCTT TATAAATTAC CCAGCTTCAG ATTTTTTINAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA  
GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTT ACTACATGGT TGTTTTGCCA AAATGAAGGC  
AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTGAGGTGA AAGAGCTGGG GTTTAAATTT GTNCTTTACC  
AATTATTGAG ATAAGTGTCC TTGAGCAAGT TACTTGCTTT CNCTGATCTT TAGTTTTCTT ATTTGTGAAA TTGGAAATGG  
TGGTGTTC A GAGGGGGTT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TGGAGCTGCA GCTGGCCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA  
AGGAAAACCT TTTTTTAACA ACTTCATAAA GCCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT  
TTGCTTCGA CACTAAAAC GTTAAATGGG GGCTTACTTT GTGCATTAT GGAAGAAAAC TTGGAAGGCA TTAAGGCTA  
CATTTTGAGC CTTCATGAT TTCATTCAAT TATGCATGAA TTCATTGTG CAACATTTAT TTAGTACCCA CTATATGCCA  
GGCACGTGC CAAATG

SEQ ID NO:1314: (Length of Sequence = 391 Nucleotides)

CCGGTTTAGA CCTCAGTCGG CGCTGTGAGG GCACGTGCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA  
GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTACGCCA GGTAGAGCGG TTAGAGTGGC AGCCGCTGGA  
GAAAGGGTTA TAGAAACACA TCCCTGACTC TTGTTTATG TCCCACGTCC TCTGTGCTC CTTCCTTCTC CTTACTCTCC  
TTCTTTCTG CCTCTCTGTC TCCCTGGAA GTCCCTGTG TCAGTGCATT TNAGTGCATT GACGTGTCTT AAACACTGAT  
CTNCACACAC CTTCCTTAT CTCCACCTG ATAGGCAGGC CCCAGANCCC CTTTTTCTT AGCTTTGTTC T

SEQ ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCTTG GAACACTGGT GTTTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT  
TAAAAAGTAC TAGCCGTGTG TTACAAATAA CTACCAGGTA AACAAAGAAA TCACTTTCTT TCCCCTTCTT AAGGATAAGG  
GAGAATAAAA TAATCACCAA GAGGCATGGA GTTTGAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC  
TGTGTGNCAT CATAATGAAA TAAATAAAG ATGTGCCCTG GCCTGTGAAT TTCAACTCTC CTGACTTAA GTTCTCTGAA  
GGGCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTTGTTTACA GGTTTTGAAA GGTTTGINAG ATTAGTATTT ACTTTTAATT TTTTGAGTAA TAGAATGCGT TTAGGTTCTA  
AATTACTATG GAAATGGCAT AGTGAGGATT CTNCACAGAT ATTAGAGACC TTCAACAACA TAGTGAAAAT AGATTGTGCC  
TTTCTGTGTA ATAGCTGAAC TATGAAAATT TGANCTGTCA CTGGAGGGGG CATTTGCNCT GAAGTTTGCC AAAGTAAAAA  
TAACTTINCT CTTTAGTAAG AAAAAGCTAT ATTTINCAAT ACTGCCTGCC ACAGCAAACA AACAAAGTCT TGTGTGTGTT  
TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA



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SEQ ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCGGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTTAA  
 CTATTATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTTATATAGT  
 GCCATTTCIG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG  
 TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GTTGGACTAC AGGTGCACGC TATCATACCC AACTAATTTT TGTATTTTTA GTAGACATGT GTTCCCCAT CTGGCAGGG  
 CTGGTCTGAA ACTCCTGACC TGAGGTGATC CACCTGCCTT GGCCTCGCAA AGTGTGCGGA TTACAGGTGT GAGCCAACAA  
 GCCTGGCCCA TTTATTTACT TTTTAATTTT CATTTTCTT CATCATGTAG AATGGACAAT TTCAGGAAAC TGATAGAAAA  
 TACTGTCTAA CATCAAATTT TCAAAAAAGT TTCTCTGTAA CAGATAAGGC AGTCAATTTT

SEQ ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG  
 GGTCAGGTAG AGGGCTCCTG GGCCCACTGT AGCCCTGCTT GGGTCAGTGT AGCTGGAAGG CTACGGGNC TTAGTGGGGA  
 GCCACAGCCT TTCCCACTAG GGGGCTCTC ACTCTGACAT CTCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC  
 GCTGGCCCTA AAGGGAGGTG GTAAATNAGT AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEQ ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGTCTTGATC TCCTGACCTC GTGATCCACC CGCCTGGGCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGTGCCTG  
 GCCGAGATAA TTAATTTTNA GTGACGATTT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA  
 GAATATTTGA ATGCTGGTTA ATATATTINT TTTAACTGT GATAGAATTG AAATCTTGTA GCCACATTTT GAAAGTTTAT  
 TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTTCTACAAG AGAGAATTTT CAAAAGGTT AGTTGTGTT ACATTAAGAA  
 CTTGGGGTTT GNTTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTITGGCTAA TCATCCTATG ATTTTCCTAT AGCTTGAAAA CTTTATATAT CTTAAATTTT TTNATAATTT TGAAGTATTA  
 TTGTTTGGG TTTGTATATC CAGTGTATTT TCAATTAAAT TCCCCTAACT AAAGTAATTC AAAAGGAATA AAAGTGTAT  
 GTGGGCTGGG CGTGGCGGCT CATGCCTGTA ATCCAGCAC TTTGGGAGGC CCAGGCGGGC AGATCACCTG AGGGCAGGAG  
 TTGGAGACCA GCCTGGCCAA CATGGTGAAA CCCTGTCTCT ACTAAAANTA CAAAATTAGC CGGGTGTGGT GGCACATGCC  
 TATAATCCCA GCTATTTGGG AGGCTGAGTC AGGGAGAATC TCTTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGTA AAACAAATCC CCTCCAATG CTTTGTAGAA GGGGATTAGA ATCACTGTGG AATTCGGTAT TGGCTAATAA  
 AGTATAACG CTAAAGATCA ATGCCTGAGT GCACAGTTGT CTTCAAGCC ATTGTACTTC TGCTTTCCAA GANTAGANGA  
 CTACTTTTTA ACCAAGANTT AAAAATAANC TCATAATTTA AACACCTCTT TCATGCCAAA TGGAAATCTT AGTGTGTAAT  
 AATCAGGCTC ACCTGAATAC AAAGTGTGCC TGAAAATGCT GACAATCACA AAAAAGGTTT TAGAAGCTTT TTCAAAAAAC  
 AAGTTCAGAT GGTTCCTACT GAGTTACTAT TTGAGGTAA AG

SEQ ID NO:1323: (Length of Sequence = 244 Nucleotides)

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CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA  
TAGGATTTGA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTTCAATG TTCTTAAGTG GGAAGTCACT TATTACAGAC  
CTNATTGGGA GTAAACAAAG CTGTTAGACC TTTCATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA  
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTNACCT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG  
TAGGCAACAG CTCTGACTTC TATGACATCG TGGTCATCGC CACCCCCCTG CACCTGGACA ACAGCAGCAG CAACTTAACC  
TTTGCAGGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTTCCAGCC CACCGTCGTC TCCTTGGTCC ACGGNTACCT  
CAANTCGTCC TAATTCGGTT TCCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGTTATTT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT  
TTTTATAATC AGAGAAAATG CTATTTTTAA ACCCTACCAC TGCTGACCAA ACAACAATCA CAACAGCATA AACTAAATA  
CTGTTCAACA AATCTATTTT AGTGTAGTAA TTAAATAATT CCTAAATTA TAGACATCCC TAATATTCTT TCCNTTAGTG  
GTTCCTCAGA GTGCAATCTG TGGAGCAACT ACCTTGAAGA AATTGGGGG AATGAGACCN TGGGAACCCCT AAATGTTTAG  
NATGGTGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTTTGGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCTT TGAGTCCAGA TCACAAATTA CCAAATGAAC  
ACGTTCTCCA TTTTATGATC TTTTATACCT GTAACCTCT GTCTACCTAA GATGAATATT TATTATTGA ATGAATCATT  
TAATTTTGGT GGGCCAAAAT TCTCAGTGAA ACAATTTCTG GATACCTCTC CATCACTAAG ATAATCACTA TAGCAGTGTC  
ATATTCTTCA ACTTGNACA AATCTAAAGG CTCCATTTAT CCCTACTAGA AGTGTCTGT TGTCTTTTTC ACTCTCAAAA  
TATCTCCAT GCGCNAACCA AACACTAANG GGNACCACCA TATCTTGCTC AATGGAGGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCATTCTAT AATAATGGGT ACCATTCTGC TCTGTCCAC ATTTTATGA  
AGTCTCTTTA AATTTAAAAA GGCAATGTGC TTTGTGGTTC TTGAGCAACT TAAATACGTT GCTCTGAATA GTTATTGTGA  
TGAGGTAATT TGTAACAACT TTTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCCTTTAT TATAAAGTAT  
ATTAGGCTGG ACTCTTGGCT GTAAGTGGCA GAAACTCAA CTCAGATTAG TTAAGAAACA AAAGGTGTT GGTGACAGTG  
GTGGCTTTCA GACTATTGCT GCAGGCCAC CTGCCATCCT CTTACACCCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAAT TCTTAAGCAG AGTACTTAAG TACAAAATTG AGTGACTGAA AGATGCTTAA TCTAGGGAAA TTAATGAGA  
AAAATACATG GTGTGTGTNT TGGAGGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAAGCCAA CAGATATAGT  
CTTCTGTTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCCT AATGTCTCCT TTTTGTGGC  
AACCTGGGG CCAATTACAC TAGAGGGTTG GTAGAAAAA GAGGAATAT

SEQ ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTTGGAT ATTTNCTAAT TGCAATGGTT  
ATATTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGGN CTTTTATGAA AAGGCGACAA  
TGGGGACCTC CAAAGCGCCA AAGTTTCTGC TAGGCATAGT GTTATTTTTA GATTACATTA AAATGGCTAT TTAGACCCAT

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CTAGCTGAGA CTATTCACAA ACAAACTTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN  
TTTACTINCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTAA AAAAAATGCA AACTGAACG TTACCTCAAA ATGAAACAGT GTGTGTACTG GCTGTTAGAA GTTGATGGCG  
GTCTACTGTT TGATATTCAC TGCCATCTTC CTCTGCCCCA CTCTACCTCA ACTGGGGACC GCCTCACCTA ATGGTGGGCT  
TTGCCGCTTT ATGCCNTGTA GAGNAGACAC TGGGTAACCA CAGCAAATCA ACACGGGNTC C

SEQ ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTGAGAAGA ACCAAATGCT GGTGCCATCT TGAAGTGCT ACATCACCTC CTCCTCTTAC  
TTCTTGAAC AGCAATATTT CTGGATTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TTTTTCAG CAGCCAGTTC  
CTCTCAGAG AACTGGCCCA AGAGTTTCTG GACAAATATA TTTTGATCTT TCAGAAATAT GTTCINATTC ACTCCTACAT  
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGTCTTTGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA  
CGTIGATGGC AAATGGCGCC CCATTCACCA CAGACTGGCT TGAACATCA CCCCTCCACC TTGCAGCTCA ATATGGTCAT  
TATTCACAG CAGAAGTACT CCTTCAGCA GGTGTTAGCA GGGATGCCC GACTAAAGTA GACAGGACCC CCTTGACAT  
GGCTGCAGCC GATGGACATG CGCACATCGT GGAAGTCT TTTTCGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCAGCTA ATTTTGTAT TTNAGTAGA GACGGGGTTT CATCATTTNA GTAGGCTGG TCTCAGACTG CTGACCTCAT  
GATCCACAG CCTTGGCCTC CCAAAGTACT GGGATTACAG GCATGAACCA CCACGCCCAT CTGATTTCCC GTTTCTGCA  
GGTAAAGNC TCAGGGCCCG CCCATTGNIT TCAGGANITT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATAACTTT TTGTGAAAT TTAGAAAATG TGGATCTTTT ATACTTGCTT TCCCTTTCT TCTGCCATCT TTATCTCTG  
CTGAAGGAGA CAAACAATAT TTTAGGTGAC ATCTATCACT TTATGTAGGA CCTGCAAACA CTCATGTTGT CTTGGGACAG  
ACAAATGGAG AATGTAAATC TGTTACTG TGACAGGATA TAATTNTGGA TTGCATAGGN TINCAACAA GTGTCTGTGT  
GATGANTAAA TGGTAAAATA TATTTAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GNICTTGTIT AGAATGCAGA TTCTAATTAA AAATGTGTAG GACAGGGCCT GAGACTCGGT ATTTCTAACA AGTTCCCAAG  
TGATACTAAT GCTACTGCTT CACAGATCAC ACTTTAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA  
CAAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCTTAGTGAG  
ATTCTGCACA ATATTTTCATC ATACAAACT GNTTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAAGC ACTCTGTGT GGAATGTTCA AAGATGTTCC TAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANTTAGG  
CTGGCTCCTC CCAATGGAT ATCTGCTTCT GCATAGTTGG TGAAGAGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA  
ACCTTAGGA AACCCGCTG GTACCTGGCC TGINTTTTGT AAGTATACAT CAGGCCAGGG GGCTGCTGC CAAGCAACAT  
CATTGACTGC ATACTGTTTA GTGCATGCAT TACCAGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

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TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTTCTG GGTTTTTCCTA TCATTTCAC TCATTAGINC CAGGAAAA

SEQ ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTTTCCTCAG TATCACAGGT ACCTGTTTIN CTGGAATTTA TTTAAATGT CACCTGTAG TGTTCCCTCT CTAGGGCTGT  
TTGTTTCATT TCCCTCTGAA TGAATGCTGC CACACGGTCA TATGTGAGCC AAGTTTACAA GAATGGAGTT GCTGCTGAAG  
AGATCTCTCA TTCATCTCCC CCAGTGCCTG TCCTTCACAA TCATAACGTT ACCCTTGCTT GACAAATATA CTGTATGGCA  
AGTCATAAAG GTCTTNGAAC AGGACTTGAC CC

SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCCTT TATATAATAT AATCAAGTTC CTCCATCTGG GCATTGAGTT AAATTCTACA ACATTGCCAA AATCTGATTT  
GACTCTACAG AATATGTATA GTTTATTTAA CCAGATAGTA ATTTAAATTT TTACAACATG CGTATTTTCAT GTAATATTAA  
TAACAGTAAT TTAAATTAAT ATTCAATACA TACCGTTTGA ATTTTATATA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTCAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCTTAATGC CCCTTCCTCT  
CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGGAGTGGA GGAGGACACA GGACTAGCCC ACCACCTTCT  
CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAACAGG TCCCCTCAAT GTACCAGNTG GTCACCTATA  
GCACCAGCTC CAGATGGCCA CGTGGCTGCA GCTGTACTCA

SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTTCCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTTCATAGC  
AGGATTTGCA CTCCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGGAGCTGA TGGTGGGAAG GTGGTATTTC  
TCGC CTC GCCTACTGCT CACTCCTGC TGTGGGGTCC AGTTCACC ACAGACCACT GGTCTNTGAC TCAGGGACCA  
CTAC CTC AACANGGNTG AGGAAAACAA CTGGGTTTCAT CACACAATTA TTTTAAAGTT CAGGTTTNC AAATAACTTA  
TCC

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTGGCCAGA  
GGAACCAGGG CCTCAGCAA GGAATGANTA CAGCCTATAC TGGCTTATCC TCGCCCTAAG ACATTAAAC AGTTGTGGGG  
GTTCCTTGA ATCACTGGCT TTTGCCGACT ATGNTCCCC AGATACAGCG AGATACACTC TAAGGAGACC CAGAGGGCAA  
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAATACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC  
AAAACCTTTA AAGCAGGCCC TTCTTNCAAG CTCCAGCCTT TAAGCCTTNC CACAGG

SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCTTCCCC ACTCCCTGGT CCCCAGGAGC AGCTCCTTCT GCCCGANTNA CTCACAGTGC AGGGAAAGGA GGCAGGGAAA  
AGACCAGGAT TCTGTGAGTT CTGAGGTGTC CACACACAAA GAAGCTGTGG TTTCTCTGCC TCGCCCACTG ATGAGACTAA  
AACTGGCTTC CCCTTGAGGA CGGCAGATTT CAGGCTGATC CCTGCTAAG CCTCTCATC CCCACGCTGG TCCTGGTATT  
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GGAACATATC  
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

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GAACCCAGGA GCGGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAGAGCG AAACCTCCATC  
TTAAGAAAAA AAGAAGGGTG TGATAGTTAA ATTTATGCAT CAACTTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC  
ATTATTCTAG ATGTTTCTGT GGAGGTTATT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTTGGG TGAAGGAGAT  
TACCCCTGCAT AGTGTGGTGG GTCTCATTTA ATCAGCTGGA GGCCTCAATA GGGAAAAAGA CTCACCTTNC CCTGGAGCAA  
GAAGGAAATT CTGCCCAGC AGAACTTCTT NGGGCAGCAG AATGCAACCA TAAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGGCTG TGCTCTGCAG GTCTCTCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TCGTAGGACA  
CCCTGCAGCC AGAGCGGTCC GCGCTCTGNN AGGCTGCGCT CCTGCGCTTC TTCTGGGGA GAGCAGGTGG CGTATCTNN  
TGCTGCCCTG GGGCCAGAGG TCCGTTNGGC TGGGGATGCC CGCCAAGAGG CAGCTGGAAA GGAGGGCCAA GAAATGGAGA  
CCCAGACTCC CCCAAAGACT CTGGCAACGG GCTAAGGTTT CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG  
TCTTNTGGA GGAATTCATA GTCCGGATCA TAGCAGATCT TGTCCCTTT CTATACCATC TGTCCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

CCTCTTCCCC CAAGGAGCTT GCAATTTTAG GAACTAATCC AGTTTGAGGG CTGAATTTAA GTTAAAATCA ATTACTGCCC  
TATGTACTCC TTTTAAAACA ACAATTAGTC AAGACCTTT CAGTGCTAAA TAACTGATT TGTCATTATC ATACATTCAA  
GTTTTATAAA TGTGTTTTTC CTCATTAC TGAAATATCA GAATCCAGCT CAAAACAGA ATCAAAGAGG AGACTTTTAA  
GCTTATTCAA TAAAACTAT GGTACGGTAA TATTCAAAT AGTGGAATC ATTATATTAT CTAAATTTCT CAGGAACTG  
CTTTAACCAT GAATTAATA ATTTACC

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCCATAATTA AGTCAAGTTC CCAGCCTTAA TTATATTINT NICTGCTCG TTCACTCTCT CTCTCCTTCC  
CTCCTTCCCT CTCGCCCCA CCCCGTGTA CATTATATAC CAATTCATTG GAGATATATA TATGINTGIN TNGNGINTG  
TGTGTGNNC TGTGTGTGTG TGTGTGTAA AGAAGCAGGA TGCTTACAC AGATGTTTCA TATATTGAGG NATTACAGAG  
TAATTACAGG GAAAGGTATT AACTGTTCT TCAACACCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TTTTAAAC TTTTGTGCA CAGGACAGAA AACTGCCTGT ACATGCTATG TCCACTTTTG GAACACAGAT  
TTTTACAAT TATGAATGCA CAAATCTTA CATATCATGC AACTCTATGC CAAGAACCCA ACTTCTTCC ATGCAACAGA  
TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA  
CCAGTCTTAA CAATTNCTTG TACACAATAT TCATGTGCCA AATACAATGN CAGGN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCCTGCT ATGTGGATAT TTGGTAGCAA TGACTGATGT GGAAACTACA TATGCAGATT TTATGCTTC AGGAAGAACA  
GGTAGAAGAA ATGCAATACA TGATATCTG GTTCTCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG  
TCTTGATATC AACAGACAG AAGGTGAAGA AGATGCACAA CGAANTTCTA CAGAACAAAG TGGNGGAAGC CCAGGAGAA  
GCAGCAAAT CTGAAAGCTT AACACCCAC TTTGACCCTC GGCCACACCT GAAATGTCT CAAATCTCCA GGGNGTATCT  
GGGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

CCCCAAAAA CAATGACACA AAATTCATTT GGTAAATTCA TGTAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA  
AGTGGGAGTA TGATTAGGAG GGTGAGATG AAAACTATTT TACAGTAACA TTTCCACCAA AAGACTGTCC TAAGAACAG

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CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGTGGTATT TTTTGTATT TTTTAAAAGC TCCCTGGGTC CCAGGTGTTT  
TGCAGTTTTT AAGNCCTTAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTGCCCCA GGCTAGAATG CAATGNCGTG ATCTTGGCTC TCACTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT  
GCCTCANTCT CCCTAGTAGC TGGGATTACA GGTGTTTACC ACCACGCCAG GCTAATTTTT GTATTTTTAG TAGAGAAGGG  
GTTTCACCAT GTTGGCCAAC CTCGAACTCC CAACCTCAGG TGATCCACCT GCCTCAGCCT CCCAAAGTGC TGGGATTACA  
GGCATGAGCC ACTGTGCTGT GGCCAATAAA CTATATTTTN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEQ ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGTG GGATGAGACT TCAGCTTTAT TGGAAATGTT TTATTTCTTT ATCTAAAAAA ATACTAGAAA GAAATACAAC  
AAAAATGTTAA CAGTGTGTTA TGTCGGCTC TGTAATATA GATATTGTGT TACTTTAGTC TTTTTTTTAA TCTCAACTAA  
ATTAAAAAAG GAATTTTAGT CTTTTTTTAT CTCAACTAAA TTAAAAAAGG AATTTTAAAA CCCTAGTGTT ACATGCAAGT  
GAGTCCAATA ATGGCAAAAT AATAATGAGG NTACATAGGA AGGGTGACCT AAATTTTAAT GGGTGAATAC TGGGTCCCCG  
GTACAAGTTT GANAAATTTT GAATTTCCG

SEQ ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTACT ATTTAAAAGA ATCCTTAAAT GATGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATTG  
ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA  
AGTAAAAGTA AAAATTAAAA AAGATGGGTA TTCTATATTT ATCTTTCTATG TTACATTTTT CTTGTGGGG TTTCTAAATA  
AACTTGTA CATGAATGTT TTATTTCTAT TCTGTATTTT AAAAGAAGC TGAGTAACAA AAGG

SEQ ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA  
AAAATGCAAG AGAACAAAAA AATTTTTTGA GTAATATTCA TCTCTGAGA TCTGAGTGAC AGTCCGCTTG AAACACCGCT  
GTAAAAGTGG TAAAAAATGA TTTCAATTG ATATGTTAA AATTTTTGAT GTCTCTNTTA CTTGTTTTAG GGAATCTGG  
TCTTCTGNC ATTTATACCT GGATANGINC CTTTCCCTGT AATTTTTTCT GAAAGGCTCC AATTTC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTAAGTTAA GCAGCAAGGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGGG CCCCAGCCCC  
CAGGCACCTC TCTGTGTCAG TTTCCTGGA GAAGTCATGA GTTTGAAGAG TAGGCAGAGG CCAGGTGTCA TCACTGAGTC  
ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGTCTGTA GCACAGGATG TTAGCAAGA CTCCTGGGTT CAGCTCCAG  
TCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTTTN TGCTCTGTT TCTACGGCTG CAAAATGGGC  
ACAATAATGT CAGATTCATG AGGGATAATG AGGACTAAAA TTAGGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTC  
TTATAAA

SEQ ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGTTTCAT TAGGCATCTN CTTCATTATG AGTGCAATAT AATCAAACAC TTATCAGTAC  
AAGGCAGAGA GACCGGGACT AGCTGCCTAC ACATCCTCAA TGAGCTTTAG GAAATGTGAA GGAAACATGG ACTGAAAATC  
TTCTGGTGGC AGGTACTCTC ATGTGTTGTC CTATCTGATG CTCTCAACAA CCTCTAGGGG TAGATATTGT GACCTCATC

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TTGCAGAAGC CTTGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC  
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEQ ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTTAG TTATTTCACT CTCTCTGTTA AATTTATCTG ATAGGATTCT GCAGAGAACA AAATTCAACA GGGCCCTGTG  
GAGCAAGGAG CCCCTTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGCGGA GGCCCGCTG  
CTCCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCAGGC AGCCTGGAGT ACCTCATCCC  
GGAGCCCCCA CTTATCAGTG CAGTGGTTCC ACCCTGCCAG GGTCTNAAGT GCAGTCAGAA CCATCAGGGG GINGCCGGAT  
CTGACGGCTG TTNACACAAC GTGGGCAGTG CAAACCTAGG GACAGAAGGC ACANCINAAG TCACINCAGA TCCCATCTTC  
CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TTTCACAAAG AATTTATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT  
AAAGTGATTA GAATTTGAGA AACTTTTACT ACATTATGTG TTACTATCAT AAGAACACTC CTTTGGGGC ATTTGAATAA  
TAAAAGGNC TACATTCTTT GCACCANGTG NTCATTTTCA CCCACATTCC AGTATTTTNC TCTAACTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TTGTAAGCCC CTTGAGCGCA GGAACCTGGT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC  
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANTCTT AAGTACAGAG AAAACCTAAG AATNCTTTTA  
GATAGACAGA TAAGAGACCA CNAGAGAAGA GCAGATTCTA AGGTATNTGT GAGAAACGTT ATGTAATGAA AAGATAATTG  
ATGACACACA CTTCCAGAGN GTGCTGGCGA GATTTGATTC AAAAGCACAC GGCTAGGGCA CT

SEQ ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAAATAT TTAAAATTTT AGTACTAAGT  
TAAGTCTGTA TCATTTTACT TTTTATATAG TTTCTTATTT TATGTGTAT GAGATGAAA GCTTGCACAT AAAAGATGAT  
AAGAAATTAG AATTCATCGT TTCTGTGTGA CCAAGAAGAA CCTTAGTGAT CTCTAAAAGA ATTGTTGTGA AAATATGGAT  
TCINCTTTCC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG  
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEQ ID NO:1360: (Length of Sequence = 366 Nucleotides)

AAAATTTAAT TCAACTGACC CATCCACCG GGAAATGCCA CTAGGAAGGT GTAGCCTGCA GTTTTACCTA ATAAGCACAA  
CTGGAGGGGA ATAGAAACAC AGAATGTGA GGAATCGCA AGGCATGCTG CTCAGAGCAT GCCTAGCCCT GCACTGAAAG  
CTATGAGATA CTGGTTCTGA GGCAITGGCTG TGCTTGCTGG TGGGAGCGGG CATCTCCCT TGGCCTCCCT GGGACACCTC  
CTGTGCTCCC TGCACTGCAC TCCAGTGCC TGGGGTGTCT ACACAACING CTGCAGCTTC ACTAAAGAAC AGGTGGCACT  
NCAGCTTCTC CGGTCCTGC TGAGCACAGG GNCCGCCAN CCTTGA

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCTCTACTG TCTGTCTGT GGGACAGTTG CCTCCCCCTC ATCTCCAGTG ACTCAGCCTA CACAAGGGAG GACCAACAGG  
NTCTAGTTT TCCAGTGAT GGAGTTCAA GCTTTTTTTT TTGTTTGTG TTGTTTGGCA AAATAAAAC AATACACATT  
CCAAGAGAAA TGAATGCATC TMTGACACG TCTCTATTTT TCATTACAT ATGTACACAC GNCCCTTGAG TCGTGTCTGT  
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCT CGGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC  
ATTAGGGAGA AAGTATTAGC AGTTTCT

SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTTCATTC ATTTCATTCAA CAATATTCAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC  
AAATTTAAAG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACATTGG GAGGCCGAGG CAGGTGGACC  
AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TNINTACTGA AAATACAAA ACAACAAAC  
AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATTNCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG  
TTAGCCAAGA TCGGACCCCTT NCACTTTCAG CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGTGAATT TCATAAATCA GCACATTAC TAGATAGGTA GGATACTTTT NATCCATTIG TGTGTTAAAA  
AATTAGCGCA TGTTCCTCTT TATGCCCCCT TGTATTAGCA GAATAGTGT TCCGGATTCC CTGAATGNT CTGTATTGAG  
TCTGTATAGA CCCCAGGA AAAGGAGGAA TTCGCCGTGC CCGAGAATAG CTCGTCAGG CAGTTTANGG NAGAAATCTC  
TAAACGTTTT AAATCACATA CTGACCAACT TGTGTTGATA TTTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGCT GACCTATGA AAAATACCAC AGCCAGAATG GGCTAAACAG GTATATAGTT AATACAACCA  
CCACCATCCT TTACTTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAATT  
CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCTTGA TTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG  
GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTCG GTATCCACCA TTTTAAATTC ACAATCTGAG  
NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TCGGCTGTGA  
CCAGCATGCG GTGGAGTACT TCCTCCAGC TATCAAGTAT GAGGCCACA GCGACAAGGC CAAGGAGAGC ATTCGAGCCA  
AGTGGGTGCA GTACCTAGAC CGGGCCGAGA AGCTGAAGGA TTATTTACGA AGCAAAGAGA AACACGGCAA GAAGCCAGTC  
AAAGAGAACC AGAGT

SEQ ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCAAAGAA ACAGAGTAAT TTCTCTCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA  
TCATTGTCAA ATTTAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAAA GATTTTTTTC AGTGTGATAG AGAGGGAAGA  
CTGAAATAAA CAGAATTAC AACCTTCGCA CCTTGCACC TTCTCTCTT AGCAGTATGG CAAACTAAAT AACTTGCCT  
GAAAACGGGT TAAAAGCTG TATACTTTT TAAAAATAT ATTTNGNTTA TGTCATTGAT CTGCACAGTT TTGAATACAA  
AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA  
TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGTNTAATTA  
GTTCAACCAT TGTGGTAGAC AGTGTGAAAA TTCTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT  
ACTGGGTATA TAGCCAAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGCATGCATG TTTGTTTGCA GCACTATTTT  
ACAAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)



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CTGGGACAGA GACCTTTGCA TTGCTCCATG TGTGGCTTC AGCTGGGACA GAGACCTTTG CATTGCTCCA TGTGTTGGGG  
 CAGGTCCTCC ATTTCAATCT CCTCTGCCCT AATTTATAG CCATACCTGT GCTATTTATT ACTTTTAAAC CCTAATCCTT  
 TTTCCGTAAT TGTGTTACAT TTTCAGAGT GCCAGCATTT TACAATGTGT CTTTTATGTC TCACAGAGGT CATCATTAAG  
 TTAGACCTTT GGCTTCAATG GTCTCCGAG AGATGGTTTA TAAATTTGC ATNCTTCTGG CACAGGTGGT GTGGCTTAGG  
 GATTAGGACA CAGCCTGCCT GAGTTCACAC CTCATCTCTC CCACCTTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTTCTGGTC TAAGTTTAT TATTTCCITT CTCTGCTTG TTTTAGGCTG ATATTGCACT TCTTACTCCA GTTTTCTAAG  
 GTGGAAGCTT CGACTATGA TTTCAAATCT TTTNCTTIN CTAATCTATG CATTCAATGT TATAAGTTTC TGTGAAGCAG  
 TGATTTTATT GCATCCACA TTTTGATAGG TTATATTTCC ATTTAGTTAC AAATAATTTA AATTTCCCTT GAGATTTCTG  
 CTTTGACTTA TGTGTTATTT GGAAGTGTAT TTTTATTTCT CAAATATTTA GAGATTTGCA GCTGTCTTTA TGTATTTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAAACATA AATNTTGACA AGTAGTTCAA GACTGTGTTGG ATAAACTTAG CTAGAGTGCA GGTCTAACT ACCCATCTTT  
 ATAAGGAAGC TGAAAAGGGA AGTATGAGGA CAGGGAGAAC AATGACTTTN TCTCTCAAGC TTGACTTAAA CCACCAGGAA  
 AGTTCTTAAA GCCAAAGCCT TTCTCAGACT CTCACCAAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA  
 AATTCTGTAC AAAGTAAACA ACAGCTGAAG CAGGAAAGGN ACATACATTT NNTCACTTAG TGGCAGCAG GCAAAACAGA  
 ACATAGGGCC AGCTTGTTTA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTTCTNCT GGGCGCGAT GATCTGAGCA ATGCCCCCA CAACTTGGT TTTCACTACA ACATGCTCGT CATCAGCTTT  
 GCCAAAAGCT GCCTTCTGGG CTGCACGAC AAGATTGINT GAGGCTCTTT TCACAGCATT TCCTGCCGCC TGTAGCCGCC  
 TCATGGCCTC TNAATCTGG TCGGCCTTCA CCTTGCAAGC CACCAGCAGC TGAGCCGTGG AAGCGCGAC CTGCTTGGCA  
 GATGAGATGA GCTTCTCCTC GCTGGCGTGT CCCTGAACGG AGGCATTGGC CGCCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCTTTCA GATAATGTTT CIGTATACIT TATAAATGCT ATCTGTGGTA TCTCCTGTAT AATTNACAAT GTTTGCATGT  
 AAAAAACAAA ACCCATAGAC CTTAAAAAAA AGAAAAAAG AAATATACAC TATACATAGG CACAGCTTAT GCCCAGAGCA  
 TAGCAGGTGC ATAAACACT GTTGCTATAA ATGCAAGAAA AAGGTCATTT AACCACAATC ACATTTTTTT NCATAAGNGN  
 GTCTGAAATC TATACAATAT ATACATCTAT GTTCAATGT GGAAATAATA TTCTTTTAAA TTTCAAGGCG TGTATACCC  
 CTGCAGGCCT GCATAAATGG

SEQ ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCCTGGGG GTGATTTAGA ACTTAGAGGC ATTCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTIN CTGTAATGAT  
 TCACCATGGG AAAATAGTA ATTCTTTAAA CTCTTACTT AATCTTATAT GTATTCCAAA TTINCTAAAA AGAAATTAAC  
 CTAGAGGTTT TACAGAACTC CATTTTTTTT TTATTINCCA GAAAGGAAAA ATTTATCTGT NCTGINATTT TGTAAAAAT  
 CCTATTCCAG CTACTACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGGAGAGA GGAAAGGAAG GGACG

SEQ ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCAA CAGCCCAATC TGGTACTCAG TCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC  
 GCGGATCCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

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AAAGGAAAAAT ATAAAAGAAA ATAAATCTC ACATTGGTGC TTAGCAGGAG AATTTTAA GACTTACAAA TCAACAAGCT  
GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCCTACATG GGGCTTINAG TGTCCCANIA GTAGCAGATG TCCCAGTTCT  
ATAAAAT

SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTTTCAGGC TTCTCTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC  
TAGTCTGAGT TGGATGCAAG TTAGCCATTT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT  
TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTTAAA GATTCTAAT TTTGACCAA  
GATTTTTACT TTCTTGGTAT AGAAATGGAA ATAAACATTN ACACTTTAGG TTTTGAAAGC AACCACCTCC TAACACGGTT  
CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAAT CCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAAT TATGGTGC GA ATAAAAAGG  
AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAATAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAACCGC  
AAATGCCCAT GANCTGATGA ATGGATAAAC AAAATTTGGT GTGTGTGTAT ATATGTGTAC AAATTCCTT TTTATGATGA  
AATAGTATTT CATTGTGTGT GCACATGTTN CACACACANT TTAAATAGTA TTTCTGCATA AAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGGAATACAC TTGTGAATAC AGTGIGTAGG ATACATTAACT AGTTTTCTGA GTGGGCTGCT CTTTTTCTCT CAATACTGTA  
TATATTTTNN TTAAGCTCTT CTTTAAAGA TAAATATTTT TCATACTTCT CTTAAATCCT CAAGGATTAA CTCTGAGTCA  
CCATTGTGGG TATTTTAAAT CCTTTTAAAT AAATCTCTGT ATTTGCACTT GCATCAAAAC AGTAAAACAT TTCACAGGGT  
AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAG ACTTTATGAG CATCCACTGA AATTATGGGC  
ATTATGTCAT ATAAATATCC AAAAATCCAT TTT

SEQ ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTTGGCAA ATATTTGGGT GAGATTGAA AATAAATTAC ACCACTGCTG CACAAGTTAA TGTGAATCAA GCATCTGTTT  
ATTTCTATCA GTTATGCCT TTTTCTCTT TTTTGTGAG TGCAGTTGGG GTCACAGACT CTCAATTTGA CAAGACACTT  
TAAAAGCAGG AGTAGAAAT AGGCTGGGT TTTACAACTA TTACAGGAAC TGTCAATAA AACTTCAAGT GGATCAGTTT  
ATTTCTGATT TAACTTGGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCATTA TAGAAGTCCC AAAAG

SEQ ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCGCAAAAT TTAGCTGTTT ATTAGGTGTC AAGTCTCTCC TTCTCTCCCT GCTTCTCTT TCTNCTTTTT CTCCCCACAA  
ATCCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCNTATTAA  
TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAAACGTTT TCAAAGCAA AAACAGAAAA CAGAGCTTCC  
ACCCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCAAT GTGAAATCTA TTATAAAGTG ACAGGTTTTT  
CAAGCAAGGA AATCCAATCC AGTTGGGGGT TG

SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTAG TGAAGACGTG AATAGATATT NCTGCAAAGA AAACATACAA GTGGTCAATA GGTATATAAA AGGTATTCAA  
TATCACTAAT CATCAGGGAA ATGCAAATCA AAACCACAAT GAGTATCTN CTCATACCTT TNATGATGGC TAATATTAA  
CGAGAGATAA CAAGTGTTTA TGGGGGTGTG GNGAAAAGAG AATGTTGAA CACTCTTGGT TGAAATATAA GTTGGTAGAA  
CCATTATGCA AACAGTATG A

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SEQ ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTGG GACACAGASC AAGACTCCCT CCCAAAAAAA AAAAAAAAAA TTATTAGAAA GAGGAAGAGA  
 GAGATGNCAA AGCCTTTTAC AGTTGGGTGT TGGNGTITAG AGACCCAGTA CCCAGCCTG ACATACCTAC AGAAGCAGTG  
 AATTTACTTA TTTACTGTIA TGAAAAAAT AGATGCTGCC AGCCGTGCAC AGCAGAACT ACTATTGANT CATATGGTTT  
 TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEQ ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA  
 AGATCACCCA GTAAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAAATAC  
 AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAATT GTAACAATAG CAGACATTGG TATATAGATC CTATAAGCGA  
 CAAGAGGGAA AATAGGATTT GCAANTTAAG CATCTGGAAT AAATATTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GCGCGTGGG CTGCTCTGGG ACCGCTTCGT GCGGGGCTGC CGGCGCGACT GGTACGGAGG CAATNACCGC  
 TCGGTCTATCT GCTCTGACCA CTTTNCCTCA GCTGTCTTTC ACCTCTCTTC GGTATCCAG AAGAACCTGC GCTTCTCCCA  
 GCGNCTGAGG CTGGTGGCAG GCGCGTGGC CACCTGTCAN CNGGTGCCCG CCGCGGCACC TAAGAGGGGA GAGGAGGGAG  
 ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGAT TCT

SEQ ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGTGGTTTTG ACATGTAGAA AATAAGATGG AAGGCTGAAC TAGGGCAGTG GTGTTGGCAA ATAATCAGAT TTCAGGAATA  
 TCACAAAGTG AGGNGCCAG GATTTCATGAC CATTTNATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAGTTT  
 CTGGCTGAG TAACTGGAT ATCAACAAGT CATTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTTG AGATAGAGAT  
 AGAGGCAATA TAAAGNNTTA TATATTGACC ATGGTAAATC ACCTAAATTC AGAAAGTTGT AGAAAACCTG GGTCTGGANC  
 TCAGGAAAGA CACTGGATAT GTAGATTGG AAAGTTATCA ATCTCAAAGT GATTGCIT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTGG GTGTTTCTCG CAGAGGAGGG NITTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA  
 AGTGAACAAA GGTCTCTGGT TTTCTAGGC AGAGGACCCC GAGGCCTTCC GCAGTGTGTTG TTTCCCTGGG TACTTNAGAT  
 TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCTTCA AGCA

SEQ ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCCGGGC GACGTGACCG CCGAGGAGGC AGCAGGCGCT TCCCCCGCA  
 AGGCCAACGG CATGGAGAAT GGCCACGTGA AAAGCAATGG AGACTTATCC CCCAAGGGTG AAGGGGAGTC GCCCCCTGTN  
 AACGGAACAN ATGAGGCAGC CGGGGCCACT GCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTANTTAG GCAAGAAGAG GTGTGAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCCTA  
 ATACCAAAT TGAGCTTACA ATTAGGAAT GAGTATGTGT AACAGNTAC AGGTGACAGT GAAGATAGAA GAACCACGNT  
 GACCACAGAC TCAATGTGCT CTGTAAATC GCACAGTTTA CCCAGCATGA CTTTCCTTAG GAGGCCCCCT CCTCACGCTA  
 GAGTAAAGT CCCAGTTAAG TGAAGCCTAC CAGAAGAACT AGTAGAAGAA GCTTT

SEQ ID NO:1388: (Length of Sequence = 201 Nucleotides)

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GCTAGTNATC TCTCAGACAC TTGGTCGGTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGC  
TGCAGGGCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA  
CCCTNITTTNT GGATGTGGAG GAGCGCGGGC CGGAGCATTG T

SEQ ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGGTAA AAGAGCCACT TATGACCTCA GGIGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA  
GCAGATGTTT GGGATGACAC TAAAACTCA GTGGTGAGAT GATTCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG  
GGAGGGTGGG TATGTGAGCA ATGGTGCCAA TAGCGGCTCT TTATTTGCCT TGTCTCATT ACTGCCATCA GGAAGGTGCT  
ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCTTGGGT TAACCAGACA AATAGAACTT CTFTTCCTAG ACTGTTGGCT  
TINTGGAGGT TGGCAGCCTC TATCACAGG TAAAATTTC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTC

SEQ ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTGATAGGC AGATAAGACT  
AGGTATCAGC AAGACATTTC AAACAAAAGG AACATTATGT AATTTTTTAA AAAAATACAT GAAAATAATA TTTAANCAAG  
GAAGGAATAT GATAAAGAN GGATAGTTAG TAAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT  
CCTAAACTAC TGGGGAGAGG TCTCATGTCA GATTTTGATT ATCGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT  
TTGTTTTGAA CTTCAGTGT CCNCTATTG TGGCAAATA TCAAATTCAA ACCAAATATA C

SEQ ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCTTAAGCA AGGCTTACAG ACTCCAGGG AGAACAAAAT CTCCTTATCT CTCIGGGT TTAGGACCCT  
CATCAAGTCA TAGAATGAA ATAGAGAACA TCAATTGNC AACTTTTTAA TTTTAATAGT TTTGTAGTA CATAAAAATC  
ATGTTATGAA TTATTTTGTA GTTTTAATTA TAACTTTTT AGCACTTTTA CCATATTCCT AAAAATTAAA AATTATGAGT  
NCTGAGAAAG CAGTGAAATC ACATATAGGT ATTGATTAA CTTTATGTG ATCTTTTACC TCAAGCTAAT GTTCTTAAA  
ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTTAATA TTAAAACAA TTTTATTCAT GAAATATGC TGTACAATGC ACTCTACACA GCCTCGACAC GGCACACAG  
CACACGACA CTCTGACGGC ACGGCCACGG TACACTGCCT ACGATACGG CCGGGGACGC CGCGCCACC GCCCGTCCCG  
GCCGGACACT TATAAATATG GGAGAAGGGC CAGAACTNGC GCGGAGAAAG GGGCGTCGGG GTT

SEQ ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGTTTAT TATTTCCCAA TGINTTTAC ATTTCATTT GGAAATATCA TTCTGACAG AAATAGNTAC ATTATACCTT  
CGAAAGCAGA AAGATCTTAA TTAATTAAAA CAGTTTACAT TTACCTTAGC ATTAGGTCTG GCTGGCTAAT TTCAAAGGAT  
TAAAAATTGC ACCNAITGG GCCAACTGGG GTCTGAATA ATTATCCNGG GTAAAAGTAT AATATTTTAT ACTTTATACA  
TTTTGCTTCA TCACATTT ACTTCCACA CAGTGTCAA CTTCACATTT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCTTTGCAT CCCTGGGACG ATTCCAGTT GAGCATGGT AATAATCTTT TTGATAGGCT GTTGGATTG AGTTGCTAGT  
ATTTTNTGG GCATTTTGC ATCTGINTC ATCAGGGATA GTGGCTTCA GCTTCTTTT CGTGTGTGTG TGTCCCTGTC  
TTGTTCTGGT ATTGGGGTAA TATTGGCTT GTAGAATGAA TTTAGAAGAA TTCCTTTCCT TTTGATTTTT TTGAATAAT  
TTAAGAAGAA TTAGTATTAG TTCTNCTTA ATGTTTGGT A

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SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTTTTTAA GATTTCAAAC TGGGTTACAC ACTGGAAAAG GCTGGGTAA GGGCCGAAAT TTAATAAATC TGTAAGTATA  
ACTAAAGGCT ACAGAGATTT CATATATTTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC  
TGTCACCCAG CATCTCTGAC GCCGCTCCT AGCCTTCGTT GGTGAGATAA CCNGGNATAG TGATTCCATG CGTAAACAAC  
AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GTTAAATAA TATTGTCATA  
GAG

SEQ ID NO:1396: (Length of Sequence = 384 Nucleotides)

TGCCCTCCCG GTTCATGCGA TTCTNCCGCC TCAGTCTCTT GAGTAGCTGG GATTACAGGC ATGCACCACC ATGCCTAATT  
TTTGTACTGA TGCCAGCACT TTCTTAGCAA CCCAGCTGG TGTCCTAGTA TGCCCTCC AGTCCACTGT CTCGGGGCC  
AGTTCAGGC TAGGACTTGC TTAAGAGTTT CAGTCTTGT AGCCTATACT GCCTTTNACG TTTATTTAGA GATCTAGAGC  
ACTTTAACC TCAGTGGCAA GGTGTGGG AACTTGAGTT CGGACCACTG GGATTGGCAA ATCCCCCTCT GGGCTAGGGT  
TGCTTTAAAT GCTCCCTTCA CGTGTGGGCA ATCAGCTGAG TTGTGTCAG TTTCCCTTC TGCT

SEQ ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTGAGTTTNT TCAGTGGCAT CCCCTGCTCC CCTGAGCACA CACAGTGTTC TCTATTTATG ACTGTAGTGC CAAGCAGAAT  
TTCCATGTC TTGCTAGCTG CCCATTCTCA CCCCTCAGGG TCTCATACTT CTCCTGGAA GCCTCCAAG CAGTCAATGT  
GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTCA AGTGCAAACT AAGGGAACCA GGGCTGTTC TTCTAGTTTG  
GAAGTTTTTC TTTATCCTAA GAAAAGAGAC AGACCAAAAC CAAGAAGATC AACAATAACT CTTCTCTTG TCATCAGGT  
GATGACATCA AGGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEQ ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTA GGTTCACC AAAGTATAC AAGTCTGAAG GTCTTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG  
AAGAGGCTG TCCCTCTCAT AGGGCCTTCC AGCCACTTCT TCCCCACAGG CCTGATTCTN CTGTGGCTGG GAGTGTGGAC  
TGATTGTGTA TGATGTGAGA GATCCCNNGG GGTGTGAGCT ACCGCACCTG GCTGAACCTT CAAGGAGAAG TTTGTGCATC  
ANTTTTCAAA AAATTATGAT ATCAAAGAT AGCTGTGCC TACATTTGGG AAAGATACAA AAACCTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT  
CAGAAACCAT AACCTTGCTA CCCGATTGG GCAITGTGAC AACTGTTGAC ATCAATGCAG ACTGCAAGTN AGTTGGCAAA  
GCTGCTGATG TGTTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTTGA TTTGGGGGCA AGGGAGTNGA  
AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCATTCGG  
GGATGCACAA GGGATGAACA CAGCTCATTT CCTGTNAGGT AAGTTTAGGG AATTAGAAGG

SEQ ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCGGCTC CTCACATTAA AGTGGGNTTA TGACCATGAA CACTTCGTAT TAATAAATGT  
CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCTT TAACCTGAAT TCCATCCACA ATCCACAACCT TNCCTGGNAA  
AAATNTNTCC CAGCTTCTCC TTCTCTAGC CCAAGAAACA GCCTTAACAG CGNGCGATTT CATTCCTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAAC  
ATCCATCTTA TCCGAGCCCC TCTTGAGGC AAAGGAAAC AGTTGGAAGA GAAAATGGTA CAGCAGTTAC AAGAGGATGT

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GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTTATGTA CATTTGAAAA TGCCCNITGG NTACTTGGAA  
CTGCTAAATT ATTTTATTTT TTACATAAGG TCACTTAAAT GTAAAGCGGT TAAAAGACAT CTTTNCINGC ATTGCCATCT  
TAATATC AGATATTACG GGATGTTAG

SEQ ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCTA TTTGATGTTA TTTTAAGAAA TTAACCCCTA AAACITTAAT TCCITAAAAC AATCTCAAAC AGAAGAAGCA  
AAAGCTTGIN CTGTGCTCCA GGAAATAAGA TTCAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT  
GAGTGGAAAA AACCTAACAT TTTAATTGTT TTINCTCTCA ATAATTGTTG TGAACCATCC AAAAAAGTAT GATACAAAAA  
TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGNNACA  
ACACTTAGNC TCTCCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAC TTTGTTGCC AGGCTAGAGT GCGANGGCGT GATCTINGCT CACCACAACC TCCATCTCCT GGGTTCAAGC  
GATTCTCCTG CCTCAGCCTC CTGAGCAGGT GGGGTACAG GTGCCCGCCA CCGCACCCAG CCAACTTINT GTTCTCAGCA  
GAGACGGGCG TTGCCCATGT TGGTCAGGCT GGTCTCGAAC TGACCTCAAG TGATTTGCCC ACCTTGSCCA CCCAAAGTGC  
TGGGATTATA GCGGTGAGCA CTTCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG  
TGACTCTTTC CTTCATTG GGACACTTTA AAAGGGGTTA TTAAATGAC CCTAATTACA A

SEQ ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGCTCATCAG CTATCATTTG TGTTAGTGTA TTINATGTAT GGCCCAAGAC AATTCTNCTT TTTCCAGTGT GGCCAGGGA  
AGCCAAAAGA TTGGATACCC CTGACAGGAT TCCAGGATTC TTTTGTAAT NCTCAGAGGC CCTCTGTGCA TACTCGTAA  
GGACTATCCA CATCTTTAT TACTTTCATT GGCAATAGGT ATAAAATTTT ATTTGTGGN TATTTTACTG NAATGTTACT  
TGTTTTTGCT TATTTACTGA TTGGGTGGGA GGAAGTCAAA GGATGAATAA ATCTAACNT TTTTAAAAG GAAAGGCTAA  
AAATA

SEQ ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGTCT CAGCATGTTG GCCTTACCCC CTGGCGGTGG CTCGAACACA AAGATGCGGC CCGCACGGAG  
CAGATTCACA GGCACCTTGG GGTGATCTC CATGGTTAGG AAGAGTCGGA AGCAGGCATG CCGCTGCAGG GAATGCAACT  
TCTTCTCCAG CTGCATCAGC CACCCTGGGG CCAGATGCAC ATTCTTCAGC ATCACCACC TGCCCGANTT TACAAGCGGT  
GTTTTATTGC CTTATCTGCT TNGTTAAAGC CTTCTTCAGA GCCGATTGCA ATTGAAGGGA TCTTCGGGGT TCTNCTCGGC  
TNCAAAGGTC CTCGACAATG TTCCCTTG

SEQ ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCCC TTGTTTATG AGACAGGGTC TCATTCTGTC ACTCAGGCTG GAGTGCACTG TCATGATCAT GGCTCACTGC  
AGCCTCGACC TCTCAGGCTC AAGTGATCCT TGCACTCAA CCTCAGGAGT AGCTACGACT ACAGGTATGC CCCACTATGC  
CTGGATAATT GTNCCTTTTT TTTTTTGGT AGAAACAGGG TCTCATCTG TTGCCAGGC TAGTCTCAA CTGCTGGACT  
CAAGTGATCC TTCCAACCTG GCCTCCCAA GTGCTGGGAT TACAGATGTG AGTCACAATG NCCAGCATGG ATTGCTCTT  
TCAGACCCAG ACCAAAGAAC AGGACTTATT TGTCCAAGA CCAATCTAGG NAAAGTATAA GCTGTGTTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GTTAATTGGG NTCACAAGC AATAATTTCT CCACAACAA AACCACAACT TGAAGNGAGT TGAAAAGNGN TCAATAGTGG  
AAACAGTCGC CTCAGTACTT TTNCTTTCTG GNTTTCATCT CTAGAAATTT NAAGTGTTIN AGNCAGAGTC CACCCTTTG

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GCAAGGCGNG AACCNATGAA TGGACTCCTT GTGTGAATTA TTGCATCTTC TTCCAAAGCA GGTTTCATCA GACTTTCACA  
GAGATTCATT TTNTTGAAGA AGTAAGGGTT AATAGGAGGA TAGAATTGG TTCCNAATCT AGTGNTAAAA GTGTCCAAGC  
AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEQ ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGCAGCA CCACGAGCTG ACCTCGCTCT TOGAGTGTC GGTCGCTTT GACTATGTCC TGCTCCTAT TCTGCAGTGC  
CAGGCCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCGACGTGC AGGGGCGCCC TGACGCCAG  
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTCGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCTGA  
CCCTGCACCA TACGGAGAAA CCAGAACATG AAGACATATG TNAATACCGT CCTACTCCT GNCATGTCC TGGTGCTTTC  
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNINAATGG AACGGCCAC AAAGAGCA

SEQ ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAATC CTAAAGCTTT GTTAATATGA GAATGTCTTT ATCTCTTCIT TATTTCCAAA GGACAGCTTT GCTGGTTAAA  
ATATTCITGG TTAAGTTTGG TTTTATGATC TTAGCATATA TCATTCCACT CTCTCCTGGC CTGTAAAGCC TCTGCTGAAA  
GATCCACTTC TAGCCTTATT GAAACTCCCT TCTATGTTAT TCGNTTCINC CTCTTGCTGC TTCCAACATC CTGTCTTGT  
CCATAATTG TAACAGATTG AATATAATAT GAATTAGNCC TCITTAGACT GAATCTCATT GGAGNCTTTT CACCCITCTT  
GTITTTGGGT ATTTATNICT TTTCACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTTAT TCTGCCITAA ATCAATGGCA AATAAGTCAA GATGACATTT TGTAATGTA GACTATGGAT AACTCCTAA  
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TNCITGTATG TAAGCAATAA TTTTCCCGTG TCTTATGAG  
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTTCCT TGCATGTGGG TTCCATATAG GTGCAGAAAT TTCTCAGCC  
ACTGGAGGGA TTTCGACCAT ATTTGTCATT TGGATGAGCT GTTATTAGAT TGAAATCTAC ACATCATTTT ATTAATAAATT  
GTGCCCTAGA AAACGCAAAG CINTTGACA ATGGCGATTA AAATTATGGG

SEQ ID NO:1411: (Length of Sequence = 385 Nucleotides)

GTCTCAAACCT CTGACCTCA GCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT  
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTTTT ACATTAGTGA GATTGGTCTT TGGGGCTATT GTACTTTTTT  
TTTTTTTTTT TTGAGATGGA GTCTTGTCT CTACCCAGG CTGGAGTGA GTAGTGCAAT CTGGCCAC TGCAACCTCT  
GCCTCCTGGG CTCGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCACCGC ACCTGGGGTA  
ATTTTNGTGG TTTTATGATG AGAATGGGG TTTTGCTAAT GTTGGCCAG GCTTGGGCTT GAAAT

SEQ ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTGAGAT TCCTCCTGGG CCTCCTCGCC CCATTGCGA CAGATTGCT ACCTGCTCCA GCTCAGCGAC CCTTCCCTCT  
ATGATGAAGT GCATTGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTATTTCTC CCCATCGGGG CCACCGTGA  
CATGGAAGGA GCAGCCATCT TCCAGTGTG GCGCGGGTG TTCATTGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC  
AGATTTTCAC CATTCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GCGTNCAN CTNGAGGGGT CCTCANCATT  
GCCATTATCC TGGGAGG

SEQ ID NO:1413: (Length of Sequence = 367 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCAGC TTGGAGTCA AACTGAAAA  
TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTTAA TGTGGCTGGA TATTCTCACA

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ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA  
 TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCATT CTGACGTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT  
 AGNCCAGTCG ACCCATGTTT TCCTTTCTAC ANCAGCATTG GACGGTG

SEQ ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC  
 AGAAGGAATC TTTACAAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC  
 CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC  
 CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCINTGGC TTCTCGGATC CAGGCTNAGC CAGACAACCT GGGACGTGCC  
 TCTGCATCTT CAGACAGAAT TNCTAGCCTG CCTNAGGAAA

SEQ ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAACACA GCATTGAAG TCTTAATATT TTAGTACATA CTATACTATC TCINCTTACA ATTGTTTTTT GTTAAAGAAA  
 CCATGTTTTT NATTTCTAAG AGTTTCCTTT ACTGTGGATT TTAGTGATTG CATCTTTGTT GATGGGTTAA GATTGTCCNN  
 ATAGCAT TAGTNCCTTC AATGTGCTGT ATTCAGTGCT GCCTCTGGGC TCCTAACTG TGGAGGGCTG TTTGTCCCTA  
 TAAATGG GGACAGATTG TCCTGCTTTT TAATTTTCAA TGCCTGACTT TTACCCNCTA ACTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTTT GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACCT TAGTTTTGAT GAGATAACCT CCTTATCT  
 TAAAAATGGT CTCTATTATT TTCCAAGAGA AGACCAGTAA AACTAAACA CCTGCCTTGA TCTCAGTGTC TTAGATGTTT  
 TCCTGTTTCT CCTTTATCCT AGCAAACCTCC CCAGGTGCTT ATTCCTATTC CCATTTTATA GATGGGCAAC TGGTAAGAG  
 AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCCCC AAGGTTCCAC  
 TGGGGCATCT GAAGGAAGGG GTTTCTGGAA GTGCAAAATA TAGGGTACTG

SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTTCC CCAAGGAGC CATCAGCACC AGTTGTCCA GAGCAGCCAC AACACCAGTG ACCTCCCTTC TGCTTCCGGC  
 CAATCCCGAC AGAGCCTCTT CCCGAGTCTT GAGCTCCTGG ATAGCTGCCT CAATAAGCA GGACTCGGGA GTGTGCTTCT  
 CCTCTGCCAG CTGCTGCTCT AGTGCTACTT TCTCCTCCAG AACTACCGG TGCAGCACCT GCTCCTTAGA GGCCAGCAGC  
 AACTTGGAGT ACTGGCTGTG CTGTTTCATCT CCTAGATGAA TGGGATGGTC TACATTATC CATTTGGGAT TTTGGGCAAA  
 AGCCACCAAC AACCCCTTTT TTTCCCTCTT CAATCAAGCT GCAAT

SEQ ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGTTTACAA AGCTGTGGA AAACCTTGIG TCCTGATTC AACAATCAG CTTTGTTTGA AAGATGAGCC  
 AAGCTCAGAG AACTAAATTT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTCGGGA CTTCATTGAG  
 GAGCAATGA AAGGCACATG GACGAGCAG CTGGTGAGT TCATGTTCTT CCTGCCTGTG AATTGAATAC TGTCTGGTA  
 GCAGTTTTGG GTCCGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAGAATT  
 AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

SEQ ID NO:1419: (Length of Sequence = 363 Nucleotides)

GTGGAAAACG TGGAAATGAT GTGGCCACTG AAAGAAATTC AAGACAACCTG AAACAACCTG AGATTTCCAT TTTAGCTCG  
 TGTTTCTTA TGAACAATAA CATTGCAGAA GGGGAAATAT CAGAAAGTTG ATTGATTTTT AACCCAAAAA TAGAACTTTT  
 TGTAAGCTAG GAAAGCATCT AAAATTAACA AGAATACAAA AATGCACTTT TGTTTACATT TGCTCTATTT AGATCTTACA



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AGAGATTATG TCCTGAATCT ATCCTGACTT CAGCAAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCOA AATCGTTTAC  
AGGAAGTTAC CTAAGGAGNC TGACAGATTG AACGGCTGCT ACC

SEQ ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTTTC TAGAAGCAAA TAGTGCCACC ATCCGTCATG AGGNTCTGTT TCTATAACGC TTGTNTGTCT TINAGACTAC  
GTAGGTGGTA GCTTATGAGT AGTAATGINC TTTTGTAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC  
AAAAACTGIN TTAATATTCA GGAGAAAATG GACGGTTTAG CAACAATACA ATGTAGACTT CAAATATGA AAAATCAAGG  
AAATTNCTGT CATTGTCTTT AAGGGCCTCC AGAGAAGTAT TAATTGTGCC TTTATGTGAA TTTAATGAGA TCATGTGAAA  
TGTATG

SEQ ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAGTGACA GCAGGTAAGA NTCCACCTCT NTCCCTGCCT  
GCNCTGGGA TCCAGTATTG GCCCATGTAT CTNCCCCATT TCCTCAGGCT TCCTGGACTT TTNTGGAGG GAAAGAGGAA  
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGGAGACGG  
CGGCTGTINA GAGACAAGGG GAAGAGACAG AACACAGGAGT ATTCTAAGAA GCAT

SEQ ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TTTAATAGCT GCTGCAAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATTGC CTGTGTGTGG  
TTATAAAAC AAGGGACATT AATGINCTTG TTTTGTACC ATAGTAATGT GNAAAAAAA ATAGTGGTTG NAATGGTGT  
TAATTGTAC AGTTTGTGTC AAAGTAGAAT GGNCAGATA TTTTGGTGA TAGGCTTTTG TCTAGTTAT AAAAATTAGG  
NCATTGTGTA TGATAAAGGC NGAGAATCTT AACAATTGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEQ ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTC AGGTACCTTC CAACACTAAA  
ATGGTATGAT TCCCAGCTTA CAAAAGCAA ACTATTTTAA TATTCAACAC TCAATATAGT GTATCAAGCT CTCGGTTTAT  
GTTTAAGGGC TTAGGNNACA GCAGCACTA TTCGTGGGCA ATTAATNCAA AAATCATGT TACCAAAAAG GCATGTTTAG  
GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEQ ID NO:1424: (Length of Sequence = 297 Nucleotides)

GGAGGATTAC TTGAGCCCAG AAAAAAAAAA AAGCCTCAGG GGTTCGGTG AATGTTGTGT GGACTTCCGT GAGAACAGAC  
GTTTGATGTG AACTGANITC AAGGCTGATA CAGCCAGAA CCAGGNACAA GGTGAGAAAC TGCTCGTTTC CGGGAGGCAG  
GACTTCCTAA CCGGGAGGCA CTGCAGTACA CTTTCTGAAA CAGGTTTGA GGATAGGGAA ATTCTGNC A GCGCGGGGG  
ATCCACTTAG TTTCTTAGNA GCGGCCGCA CCGGGTGA AGGCTCCAGC TTTTGT

SEQ ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTTTTCAA GGATGGAAAG GTCAGAGAAA AATAAATAA AACATCTTTC AATAGTCTTT CCGGTAAAA GCAGCGTCTC  
TNTGGGCTGG GGAGTAAAGG GTGTGGGGCA AGGGAGTGG GGAGAGGCTG TAAACCTTCC CCCAAACCC AGTTTATAGT  
CCTTTGGTTT CTTTCTCCA GAAGATGNC AGAAGGGCAT NGTGGGNAAC AGCAGGGNGG AAAATATGGT GATGACAAAC  
CCAGATGAT CAAGGGGCTG ATGCTCCTGG GGGCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

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TAGTGGCATA TGGACCGGAA AGGGTTAATT TAAAGGGGGG GAACCTCAAA AGTTTTTTTA AAAAGAAAC TTGTCTGCCA  
CAGTATGTTA CCAGTGTTAA CCCTTCGCCC AGTTAGCAAA CTTTTCGCTT AAGCCTTTTT CCTCTAGGAT ACTCCCCATG  
TTTCGGTAAT CTGGGCATA CATTMTTTAA GNATGGACCT CTTTCGCTTG TTTTGTTC ATGCTGCTGT ATGTCCAAGT  
ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTTCTTTTT TAATTCCTTT TTCCC

SEQ ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACCTT TCTTTAATAA GATTTCAGGCC AGTNTGGTG GGTGTNTGCG GATGATTGTT  
ACTGGNGCAG CCCAGCATC ACCAACAGTT CTGGGAATTT CTCCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT  
GGCCAACTG AGTGCCACAG CTGGATGTAA CCTTNCACCA CTCCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATTCTC TCCAACCTCC CCAGGTCCCA TCAGTGTTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC  
CGCTTTGAAT CCGTGCCTT TCCAATTGNC CCTTATAGCA GTCGATGTCA GGGATTGGGA CAACTTTCAA AACAAGTCCA  
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEQ ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGG AGACAGAGAG AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACCGAACCTG  
CTGTNTGAG GTAAGGGNGG CAGGATGACT CACAGGTTTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC  
AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGGTTCT GGGGTATTA CATTGATAGG CC

SEQ ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTCC TGTATCCTTT CATGGGTTTIN CTTTGTGTTT TTTTGGTAAG AACATTAAAC ATGAGATGTA TCTTTNAGTT  
GTTGTGTTGG TTGANCTTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG  
CTCACTGACA GGCCTCAAAC TCCTGGGACC CAAATGAATC CCTCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA  
GATGTG

SEQ ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTTNCCTC GATGATGCTT CTATAATTTT GCCCTTAAAC AGAACTTTC AAAAGGGAAG AGTTTTGTG AATGGGGGAG  
AGGGTGAAGG AGGTCAGGCC CCACTCCTTC CTGCATTGTT TACAGTCATT GGAATAAGG CATGGCTCAA ATCGGCCACA  
GGNCGGTGA CCTGTGCCC CAGGGTTTGT CCCCCAAGTG CCTCCATTTA AAAGCATTAA GGCCGGTACG GCATCTTCAA  
AACAGAGGGC TGGCATTGGA GGAAACCTT GCTGCTTTAG TCCCGATAGG GTATTGTAAC CCCGNTATA TTTTAAGGCA  
TTTTAAATTC TCTTCCCCC ATTTTATTGA CTTTGAACAA TTAA

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTAGTNAAC ATGGATGGAA ACAATTAATT AGGTGTGNTA AAGTGAAAA CACCAAAAT AAGATTAA AAGAATGTCA  
GGTATCCATA GAAAAATATT AATAGGTCTA ATACATATGT AAAANTTGGC GTCCAGGGG GNAGAGACTG NAAAGTTATA  
TTTNNATGG CTGAAATCCC CCCAANTTTA ACATAAAGCA CAACATTT

SEQ ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGTTT TAATGCATGA AGTATACTTG TGATCCTGGA GGTGGAAAA GATTCACTAA AGATAAAGTT TGGCAAAAT  
GATCTNTCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT

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CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCTCT CAGCCCTTGC AACTGTTTCC NATGACTTTG GACTTGGCCA  
TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTTTG ANCTTTTCTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CTGGGGCTTC CAAATTAGTT  
CCAACAGTTC TAGTATTTTT TTTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTTTINAC TTTGTGATTA AAACAAAAGT  
GAAATGCATT TAGTCCCAGG AAATGNCAT CCTTCTGCA TCINACTTTT TTTTGCTGTG ACCTCGAGNT TCTCTGTCC  
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINTCTT CAGGCCCCCA CGGACGGCAT GCCTGGGGAA GCCTAGTCTA CTTACCATCA  
GCACGTTGAT CINTCACACA GCATGGAGCC ATAGTTTACA AAGGACCACG GCAGGTCAAG GACAGGCCAC TAAACTTTTT  
GGTGCTGGGC ACATNACCCA CCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

GGGAAAGGTA TATTAACCTT CTGCATCAAA GATGTAACAG TCATGGGGTC TTGGTGGCCA TCTGGTCTGA GTTAGGTACA  
GGACAAGAAA GAGTCAATTA ATCTATAATA AAGATCAATG ATTGAAAGAA GGGAGATCTG GTCTCTGTCT CTCCTAGTCA  
TTTACAGAAC AAGAGCAATG AGGAAGACCG TTATGCTATA ATCTAAGNAA CAGAATTGGA AATATGCTAC TGACTCAGTC  
TCCAGGGGCT TAACTTCCCC CTGGCATAA TAAATTTAAG GAGTCCTAAA ATTTTATTTT CCCTTACATT GG

SEQ ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC  
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACACGTT CAAAGTACAG  
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATTG TAATAAACCT  
TTAANGAAAC TTTCACTTCT TGAGTTTGG GTATAGGAAT CCAAAAAAAAA AAAA

SEQ ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTTTGA CTTTGTGAAT GAGCACAATG AAATGCCGCC TACTGATGCT TCINATGATC AGAACTCTTT TTTAATAAAA  
TAAATAACAT AAATCGTTGA ACATAATGTT CNGTTGAAT GCAAANCAAA AAAAATATGG NAAACATTTT GNTAAAATTT  
TTTCCNGNTA AAACCATGAA CANTGGCTAT GATGAAGGT ATTACATATG GAAAAAAAC TCACACAAGC ATATTTGNAT  
TTGGCTTGAA GGGAAACCCAT CATTAATGC AANGCTAGG ATTCTTTTNG AAGCAGTTGA TCCTCAGGT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG  
CCCAGTGGCA GCAGAGGATG AGGAAAATNT CGCAGGAGGT TTGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG  
GTAGAGGAGC TNGAGAGGAG CTINTCCAGA CTCAAAAACC AGATGGCTNA GCCACTGCCC CCGGATGCCC CAGCAGTNC  
CTCTGAGGTG GAGCTNCAAG ACCTT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTTTACTCT TGTGAAGATA GCACTTTAAT CCTAAATGAG CATGTAACTG GTGACAGATC CTATATCAGT TTTAATAATT  
GAAGCAGATA GTAATAACTA GATTATTGAC ATTTTNGT CATGTGTCA GCTATTGCTT CAACTTGCT CAAATTATAC

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TTGGNATTTT ATAGTGTTTT ATTTATTATA TACTCTNCTT GTAATAANNT GGTAATCTAG TTTCCAGAAT CATGCAAATA  
G

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGCGT CCCTTCCATG TACTGTAGAT GAAATAGTAT  
ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCGG GCGCTGGAAG AATCTCTGCT ACCAAACAGT GATAGAAAGG  
ATTGTTTCCA AAGCCATCTG CTCTCAGGGC TTCTTCACTG ATAGGNGTIT TTTTCAAGNA ATAATCCATG CTAAGAATGG  
GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAATT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG  
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG  
CCTCCTAACA CGTATGIGGT CACATGTGCA AAGACCTINTA TTACAAAATA TTCAGAGCAG NATTTCTINTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAACAAT GTGCAGTTT TTATACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTTAAAAAAT GGTCTTAGTT  
AGGCTTTCTC CCTTTGTCTT TTTCCAGAAG AAACCTGGAG TCTGTCAAAT TTCACAAAAT ACCCTGTTGA GATTTTCCTT  
GGCTTTGATA AGGGTGAATT CACAGATTAA TTCGAAAAG AATTTACGGC TTTCTAATCA AATTGTTTCT TCCAGGGGNT  
TTTGTGNTTA TTTAGGNCCT TCTAAAGGTT AACCCCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAAGTGAAT CACAGGGCCA AAGCCCCCTT TNCCTCACTG GAAGCAATC AGTAAGATGG CGGTGCAGTG AAGCCTATTC  
CCACACACCT CGGCACTGAT GGAGCAGTCT CCAAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCTTCCTT  
CCCATANCIT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEQ ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC  
AGTTTGAAGG TGGCCCCCTG NCTGTTATG CACCTGTCNA GGCATTTCTT TTGAAGAAGC TCCTGTTTTT TCGGAGAAG  
TCTTCTTNGC GGGATTTTTC AGAGGANGAG CAGAAGGNAC TCCTTTGTCA TACCTTGTGT GATATTTTAG AAAGTGCTT

SEQ ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAAT TTNTTGATGC AAAACCAGGA AACAAATTAT CTCCACTGGG AATACTTTGA AGAAGGGATT AGAGCGGGGC  
TAGGGCAGGG AGGATCTNTA AAAACAATA TTGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA  
ACAAGTCTCG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATTT AACACTNAG NTTCAGGAAT GCTAAAGGAG  
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGTTATAAAT GAACATCTGT TGCCTACTTA ATAGGTCAAT GAGTAGCTGT GACCCATTCT TAATTTGTAT GTAAGCATAT  
TTTTTACATA TTTGTATCTA CTTCATTTTC CCTTGAAGCT TGCCAAATTG GTTACTTCA GTTTGAAGTG ATGTCCTTCA  
TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTTTCT TCCACCTAGA TTGTCTCAA AGCATTTGTT TTTGCTGGAC  
TTTCCACTCT TGACCATAAG ATGGTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTTG TCATCTACAG  
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

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SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTTGTGT CCTGTAGGAA ATGCTTCCTT GGGTGTGTTT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG  
 GTTGTAAAGGA TTAGTCAGAA GTCATGATGA CTGTCTATA TAAATATTTG GCCTATTAAAC TAAAATTAGT ACCTTNCAT  
 TTCTCCNCIT TCTTGGGCGG GGCAGCGGGG GAGTGCAGGG GAGGGGAAAT AGGGAACGTN CAATTGTINTT TTAAGTAATG  
 CTCATAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATACG GGGTACATCT ATCTGGCCTG  
 TCTCTAGGCC TAGACAGAAG GAACAGGGAG GGTATTGT AACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTGTGGGAG GGACCCGGT GGAGTAACT GAATCATAGG AGCAGTTTCC CCCATGCAGC TGTCNGATA GTNAGTTTCT  
 CATGAGATCT GCTGGTTTTA TAAGCTTCTA GTGTTTCCCC TGCTGGCACT CATCTCTCTT CCTGCCACCC TGTAAGAGG  
 TGCTTCTGC CATGATTGTA AGTTTCTGA GGCTTNCCTA GCCATGCAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTTNCIT TCCCTGTTTT GTTTGTAACT CTAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCCGTCCCC  
 AGAGGCACCC CGGCCAGGAC GGGCAGGAGA GGAGACCCCC GTTCTGTCAT GCNCTGTGCG CCCGCCACGG TGTCTCCCG  
 AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

CCGCTGTCA CCTACGGCT GATTAACTT GCCTTCCTGT CCTCAAGAC CAGATGATGA TTATTCTCCA CCGTCTAAGA  
 GACCAAAGGC CAATGAGCTA CCGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC  
 TTCGAGAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTGAAGA ATTGTTGAA AGGAAATATG CTCAGCCAT  
 AAAAGCCAAA GGTCCGGTGA CGATCCGTA CCCTCTTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCCTG  
 AAGGAATTCC TTTTAGAAG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATAATTAC TTGCAAAGGG AAAGGATTCC  
 TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TGCCTAGAGA GGGGCCGGGA TTTAGAGAGC TGTTCTTCTG CCTATCTGAT CGCCTCTCTA GACACTGATC TATTAGTCTA  
 GTGCTGCAAT TACTTGGAAT GTAATGTTTC CTGCAATTT TTGCTTTTCA AATCTTTTC ACCCTAACT GTAAATACGC  
 CAGGAGTAGG TAAAACTTA CAGGTAAACA TTGCCAAGAN ATAAGGATTT TNAITCTTC TGCTCAGTGG CATAACTCAA  
 ATCACATGAG ATAGATTTCT TTGCATCTGT CCATGTATT TCTCTGAGGC TAATTTACAG CACTTTGTCA CGTTAGGNAT  
 TTTTTTTCCC CAGTCTGCT ACTCTCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTGCCCCIN CTGTCTTCT GINACCCAGA GAAAGCTTCA CAAGCATGCC TGNAATTNAG TTGCACCAIT TTATTACAGC  
 TGAAAGANTT GANTGTAAAG AAGGAAGTTT AATAGANCAT ATAAINCAGC AGATTATTG ATGGGGAGGT ATCTATTGTA  
 GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTAGGT AAGTCGGATT TNCITTAATA AGAGGCCCAA GAGTTAGTAC  
 CTCAGGATTT TGTTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTGTCTCTGT CGCCCAGGCT GGGGTGCAGT GGCGCGATCT CTGCTCACTG CAAGCCCCGC CTCCCAGGTT  
 CAGGCCATTC TCCTGCTCA GCCTCCGAG TAGCTGGAC TACAGGCGCC TGGCACCAG NCCAGCTAAT TTTTGTATT

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TTTGGTGGAG ACGGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCCG CTCGGNCTCC  
CAAATTGCTG GGATTACAGG CGTNACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCCTAAA ATCATACAAA  
AAGGAATT

SEQ ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANIT GGCCGGGCAT  
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC  
TGGCCAACAT AGTGAAATCC CGCCCCTACT AAAAATACAA AAAATTAGCC AGGCACCCTG TCCACAGCCC CCACACAGAC  
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTTNAG  
AAGCAGGCTC ACTACCAGGN TA

SEQ ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TTTTAAAGGC AGACTCGCTC TCTTTTTTGC  
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCTGCCT GCCTCTTGAA TACAAAGGCC TAGTTCAGT  
GTGCTTTTT TNATTTCAA TCAATTTTT CTTCCTTCCT TTTTGAGATA AAATATTAA AAGTACTACT ATATATATAA  
AANCTCAAAT CAACTTTTCG GCCTCCTCCT CGTGTACCAG GGAGTATATT CTGACC

SEQ ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAAGAAC TCCAAAGAAT CAATAACAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT  
GCTGTCTCG AAATCAGAGG ACAGTGAAG GAAGTCCGAA GATGAGCCTG ACACCATTC GACATCGCTC CTCCTGCAGG  
TGTGGAGCT GCTAGGAAAC TTCTTNTGGA CCAAGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTCCA TCTCCTGGCA  
GAGCTCCTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGTNCTCC TCANTCGCCC TCCA

SEQ ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCAGTCA CAGATGTTTC ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGGT  
CCCTACCTTC AGGTCGGAAG CAGGAAAGAG ACCAGATCCT AGAACAAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT  
AGAATCCGGC TGGGTGAAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCCTAAA AACCACCCAG  
CCGCGACACA AACT

SEQ ID NO:1459: (Length of Sequence = 343 Nucleotides)

AGAAAGGCTC AGGGATTAAAG TAAAAGGCT AGTACATCTG GGCTCCATTC CATTATTTAG TCATCCAAA GAAGTGAAGT  
GGAGGATAGT GAGCATCTAG TATATGCCAG GCACTAGACT GGCTGCAGAG GATTCAGAGA TACAAAAAC ACACTTGTGA  
CCAATTTAAT TTGAATTTAC CAAGTTGAAT GGCAAAAATA TCTTAAAAAT TTAGATGCCT TGATAAATGT AGTGGTATAT  
TATGATAGCC ATTCTATGCC TTGAGATACC GTGTATTCTA TATTGTATAG TTGAGGGATT GAGGCCAGTT GGGAGGAATA  
AATTATAGCT TGTGCTTATC AGG

SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAATAAGAA  
TAGTAACATA GCTTTCAGCA TCCTGTGCCT GANCATCACA CATCTACAAG TCTTTCAAGT CTTAATGCAA CAGGAATGTN  
TCTGGAGACC NGCAAGAACA TCAATAGAGA GCACTGATCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCNCAC  
AACGNATTGT TAGGGAGGAT TTGGGAGAAG CAGCCCCTTT GCTTAATACA TTNGGACCCC TTCCCTTAA GTTGAGGTTT  
AACCTTGAA TGCAATAACT TGGCATAA

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SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCTTACT TGTTTTCTG TCCCTCCAG CGCTAGATCA ACACAGTGT AAATTAGITG AATTTCAGTG  
 GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTCAGAC TTTCCCAAGT TAAAACCAGT CTTGAGTTAC AGATCAAGAT  
 GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGTCCCT TTTTTTTTTT  
 GCCTCCGCCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTTA GGGTGTGTAC ATGTTTTTCA  
 ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GGCATGGAGC AGGCAATGAC TTGTCATAG TCGCTGCACT TATGAGCACC AGCTTGAACCT TAGGAACTCT TATAAATTC  
 TGTTTTCAAC CAAGTATTGA GTGTCTGCTA TGTGTCAGAC ACTGCGCTAG GTGCTGAAAT CTCACCTTCTA CTGAGGAAGA  
 CAGGAACATA AATGGTGATG ATCATTGCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA  
 GGTAGGGAGA CCACACTTCT CCACTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCTCA AGGTCTNATT GCAAAGGTCA  
 TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTTCCTCA GGATAAACAC GAGCATGCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC  
 CCGGACCAA CACCGAGATG GACACCCTGC TGGTGTCTAG GTAGGAGTGA GAGTGGCTCC CGGTCTCCGC CAACCCAGTG  
 CTGTTTTTAC TGTGCGAAGT TAAGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TCGTCAITGG AGAGGAGCAT  
 GAAATCCTTT CTAAAGAAGT TCACCGCGT CTCACACTTN AGGTGCTCA TCAGCACTTC GGAACCCAAG CNTTCTGNCC  
 ACTTGCTTGA AAGGCACAAT TGTCAGGAG CACTNCCAGG GGTTCCTG GAGGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCCGTCTC CTGACAAGGG ACGTTTCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC  
 AGGCCCTGGN AGCCACGAAA GCCCTCCAGA TGCTTGAGG ACGCCGTCTN TAGCOGNGTG GGCCACGNCC GGGTGGGGAC  
 AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCACTTGCACT  
 CAGAACAAA TGTCAATCTA TTAGCAGATA ATATTATCA GTATTTTTTG AAAATACAAT ACCACANGAA AGAAACAGTG  
 GACATTTGGA GGGCTTTGAG GCCTGTGGTG GAAAAGGAAT TATCTNCCG TAAANCTAG ATAGAAGCAT TCTCAGANAC  
 TTGTTGTINA TGTGTGCCCT CTACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGGTTTAC CATGTNCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTG GCTTCTCAA GTGCTGGGAC TACAGGTGTG  
 AGCCACTGTG CCTGGCTGGT TTTNTTTTT TNAATGAACA TGTGCAAAT CACGCAGAGC ACCNTNATT CTGCATTNCC  
 TGGGTATAA CAAACATTGT CATCTCTGCC TACATTAAAG AGGCTCTGGT GTTATTTTAA TAGTCTTTT CAATTTAGTA  
 ATTAATTCTA ATTTCTCTT GAGCTGAGAT GTTATTCATT GTTCTCCTAG AGTTGCTTTT ATTTGTTCAT ATATGTTTCC  
 CTTAGCATGT TTTTCGTATC TCTTAGTTAT TAGATACCTG AACATTTGAC ATTGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

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TGATAAAAGG AAAACGTTTT GATTTATAGT ACCAAGTGCT TAAACACAAG GATAGTGTTA GATTTTCGAG TGACTTTCCT  
 TTTTGCAATT TTTGGCAGTA AAAGCCAAAC GTTGTATTGG TCCTTTTCAG AGTTGTCCAG CCCTTTTTTC CTTTGTCCAA  
 AATGATTCTA AATAGAATCT AATAAACCAA TGTAGCATT ATTTTTTCTA AATGAAGCCC CAAAAAGAA AAGTGCCTTG  
 CATCATTTAA AAAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTTCTT AACATTTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAAACA TGTATAACCA ATTAACATGG CCTAGGGITT TCTTTTTATT GGTATTCAC TCACTAACTT  
 GAATCCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCAACAAG  
 GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAAGTGTCTT AAAAATGCAG AAATGTAAAA  
 TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA  
 CGGGNTTCAA GTGACAAGCA GTAAGGATCC TC

SEQ ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CTGTCTCTGT NACCCAGGCT AGAGTGCAGT GCGGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT  
 CAAGTGATTG CCTGCTCTCA GCCTCCCAAG TAGCTGGGAT TACAGGCGCC TGNCACCGCA CCCAGCTAAT TTTTGTATTT  
 TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACCTCT GACCATGTGA TTCACCTGCC TCCACCTCCC  
 AAAGTGCTGG AATTACAGGT GTGAGTCACC ACACCCGGCC GGATTCGTGT AGTTTTCTTT AATGCATATT GAGTTTCTTT  
 AGTTTTAACA CACTTAT CTGGTTTGA CCCAACTAT TCACTATGTT TCTTGGGGGA NAGCTTGAA TCTTGGGGTG  
 GNAGCCAATT AGTAATAGC CAGGGTG

SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTTTGA GACCATCTG GCAACANAG GAAACCCCG TCTCTACAAA AAGAAAATTT GGTTTTNATA TTTATTTGTA  
 TTAAATTTT TAGAAACATA GCTGGGCATG GTGGCAGCAG CCTGTAGTCC TAGCTACTCA GGGGGCTGAG GTGGGAGGAT  
 TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTTTGAT CACACCACTG TNCCTGAGCC TGGGTGACAG AGTGAGACCC  
 TGGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTGTAGA AATGAGGTCT CACTATGTTG CCCAGGTTGG  
 TCTTGAACTC CCGGGCTCAA GTGATCCACC TGCTCAGCC TCTCAAAGTG CTGGGATTAC AGGCATGAGT CACAGTGCCT  
 GGGCCCAAAT TCATAGTCTT AACAT

SEQ ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAATATTAA AAAAGACCAG ACGCTTAAAG CAAGANTTGA AATACCTAGT TGTAAAGATG TGGCACCTGT GGAGAAGACT  
 ATTAAGTTGC TTCCAGTAG CCATGTTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA  
 TCAGGATGAG GTTAATTGGA TAGCGGGTGA TATTATGCAT AANCTTATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA  
 TCAATATAAC ATCAGCTTTA GCAGAAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT  
 CTGCTTCCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCCTATTT CC

SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTGCTCA GGCTGGTCTC AAATCTCTGG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC  
 AAAGTNCCTAG AACTGGCCAG GGGTGGTGGC TCATGCCTGT AATCCAGCA CTTTNGGAGG CAGAGGCGGG CAGGGAGTTT  
 AAGACCAGCC TGGCCAACAC GGTAACCCA CTCCTCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCCTCT  
 AATCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGA GCGGAGGTT GCAATGAGCA GAGACGGCCT  
 GGACGACAGA GT



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SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTTGAGCCTG CAGAGGCTCA CGGCCACACC  
 CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCCGAACCGA TGAGGCACAG TAGCCAGGCC CTCCCGAGGG CTCCAGAAGC  
 TCTAGGTTTA CGGGGTCACC TTCTGTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGTN TCGTGGTTGC CATGGAGACC  
 GTCTGCTCAA GTTTGCCTTC AGAATTCAGC CTGAACCTCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT  
 CCTGGCGATG GAGTGGGATG CGATGCACAG NTCTGTCCCG TTCAACTCGC CCTCTCNCAC TTCCANCAC GGCTGTTTTT  
 TTGGCGTGAC AAAAGGCCAC CTTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

GACGTTNAGG TGGGAGGTTT GTTTGAGCAA CATAGTGAGA CCCGCTCTCT ACACAAAAAC AAAAAAATA AAAAATTATC  
 TGAGCATAGT GGAGCATGGC TATGTTCCAA GCTAOSTGGG AGGCTGAGGT GGGAGGATTG CTTCNTCCA GGAGTTCAAG  
 GCTGCAGTAA GCAGTAATGG TGCTACTTCG CTTCAGCCTG GCGACAGAG CAAGACCCTG TCTCGAAAAA ATAAATAAAG  
 TAAATAAGT TGAGAATTTT GTATTTTGGT ACAGAAGGTC TATGCCCTTN AAATGCTCCA TTGGACACG CTTAGGGCAG  
 GACGCTCTGA AACTGGGAAG CCTGGGGCCC TGTACANTCT TGGCTGTCCC CTGTACANTC TCCTAACTCT AGAGGGCTGG  
 TT

SEQ ID NO:1475: (Length of Sequence = 324 Nucleotides)

TTGCATACCT GTGCTGTGTC AGACCAGGCA GAGTCATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAAAC  
 AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGAATCCTC TCTGCCCCC TTATCTCTCT CTCCTTCACT  
 CTCCTCAAC TAAAAATTGT CCTTAAGTAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA  
 TACAGTCATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGNTACT TTGGATAGTG ATACACAGTA  
 TAGG

SEQ ID NO:1476: (Length of Sequence = 244 Nucleotides)

GA AAAACCAG AAAC TCAAGTGGC TCTCTCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG  
 GACAGAGAAT GACTTTGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTTGAA  
 CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATINGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA  
 AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CTGAAACTG ATTATGACTG TTTTGAATG CATTTTGATT CCTTAGCTAT GCCTCTCAGG TGAAAGGACC  
 AATGGCAAGA GGAAGCAGAG GATTATGCA CTAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT  
 ATGGTCTATT GAGGGAAAAC TAATTAACAG TTGATCCAAG GAACAAAAGA ATGCTGTTAT GTGACATTTT GTTGGGAAAC  
 TGACTGTAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTTTA TGGTTGATAA TTCAAAGGCA  
 TAGATGAATT GGGATTCT

SEQ ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCCTTTCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCAGG CCAGCAAAAT  
 TTGCCAGTTC AAATTGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCCTGGTATT ACGTTTGTG AAAGGGCAGT  
 TCCATGAGTA CCAGGAGAGC ACCATTGGAG CGGCCTTCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT  
 GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCCAT GGTACTACAG GGGTGCCCAA GCTNCAATCG

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TGGGTTTACG ACATTACTAA TCAGGGAAAC CTTTGTCCCG AGCAAAGACA TGGGGTGAAG GGA CTACAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNGC CGGCTTGCGG GGTGAGTGG CCGAGCTAA GGTGCGGAG ACCCAAGGGC GCGACTACG ACGGCGTTGA  
TATCGGTGGT AACGACGGCC TCAGCAGCGG GGAAGATGA AAGGCGGNT CGAGCTGGGA GATGTGACAC CACACAATAT  
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTN CTGGAGGTTG  
GCGAGCTAGC AAAACTTGCC TATTTCAATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTG ACAGAATCAG  
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGA CTAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTGAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTCGATGACC CTGCTCTGCC ATCCCTGTGC  
TCCAAGGGCC GGGCCCTGCC GTTGCTGTG CCAGACGGGT CTCAGGGAGA TGCCGCCAG CAGGTATGCA TGGCGAGGCC  
TGGGCATCAA GGCCCGGATT CTATGGCTGC CAGTTTCATT CTCTCGTTGT TTGTCCCCCT AGCAAGACTT ATGAGGTTCC  
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCCT GAACATTCAC TGCACTAGCA CGNCCCGGG ACGCAGNCT  
TGGGAATCAG GCCGTGCGCC ATGGTAGAGC GGCTNGCACT GCTCGGCACC GTGACGGACG TTTG

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCTGTT TTCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTTCGTACC CCCCATCCC  
TACCTCAGCA GCAGGAAAGG GAAGTGCTGG TCTCCACCTG TNCCTACTAA GGCCCGTGG TATCCTGGCA GAAGCCTCTG  
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAAACAAA TAAGACCCTA CGTCTACTA CCTTGAGCTT GGCTCTAAAA  
CCACGGGAAA GGAAGAG

SEQ ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCTTTT TGACTAAATA GTGATTAAGT TATGATATTC CTGTTGGCCT AAGAACAATG  
CCTATGATTT AGTTGTGTTA TGTATATTTG TACTTATAAC CAAACAATCG ATTGGGTACA AGTAGCCTTA GGGCAATACT  
TCCTTAAAAA CATGTTTCTG ATAACTAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATTTG AAAAAATCCT  
CAITTTATTTT AAATCCTGTG TTGGGTAGA GGATTACAGT TGTCATTICA AATACATGAA TCTCTTGCA AAAGNGGTAC  
TTTGACAGTT TCATGGGAGG TCAGG

SEQ ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTACT GTTTTAATAT GCTGAGTACT GTTGATTCAA CAACAACTT TAATGGGTGA TGAGCTTTTG CATACCAATA  
TGAATTTNTC AGCACTTCTG AAAACTGGCC ATCAITTTNC AAATTCACAA TTGCTGGAT GTCAGGGAAC AATAGGAAGA  
AGAATGAGCG TCAATTTTCA TGCTTCCTT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAAA ACAAGCACC  
ATCAACCACA CTTCAAAAC AATTCATGTT GGCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA  
GGGACTGCTG GGCATCACTT TCCC

SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCTTAAAG CAGTCTTTCC TACAATGTG ATGCAGTAAG TCACTTAAGC ACTTAAGTGT CATATGGGTA CTTACATGGA  
ATTAGAGCAC TTCTGAATG GAATTAGAAA AAGGCAAAT GTGCATACTA CTGATGCATT CATTTCTTAC AGAGATATGA  
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAATGG AATGAGTTCT AACCTGTCT CTTACCAGCC  
ATATGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC  
ATTAATTATG CATTCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC

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SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAATT TCTCACTCTC CTCCCACTTG CTATTGTGAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA  
 TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTTAG CTCTTTTNC TGCTGGGAGA GTATTCCCTG  
 GGCACAGTGC CAAGTGTCTC TAAGAACTA GTCATGCCCTG ANCTTAAGG CTGCGGATT CTGGGTGGTG GATTTCCTTA  
 GGCTTGCTG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCATT CCGCTGAGCA GTCTGCACTN CCTTGGACAG  
 ACCCACTGGC ATTT

SEQ ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGINCTT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT  
 TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTGAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCCAAGCAT  
 GCAG

SEQ ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGCAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT  
 TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCTTCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG  
 GCCCTCACCT AACAGGATCT NCTGGGCCCT GACCCAGGNC TTACAACCT CTAGANCCAT GAAAAATTC TGTTGTCTCT  
 AGCAGNCCAA ACAGAATTAG AACCATTAAT TTCTATTCT CTTTAGCTT AACACTGG

SEQ ID NO:1488: (Length of Sequence = 343 Nucleotides)

TTGCTAGTTC AGGNTCAATG TCATGGCTGT AACTAATATA GTACATTGG CAGTTGCAAC GCGAAATGAT CCGCTGGACT  
 TGCTGGGCTT GCTGTGCTC ANCTGGCTGG TTCCAATCTG TGTTGTGGT AACCATGCG CCCACTGCCT GCCCACTCTC  
 CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCCGGTGC TGCTCTTTT GCCAGGTG AAGTGCAGTG GCGCAATCTC  
 AGCTCACTGC AACCTCCGCC TNCGGGTTC AAGCAATTNT CCCACCTCA GCCTTNCAG TAGCTGGGAT GACAGGCGGC  
 CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTTT TATAACCCAA GANTGCCATT ATTACACCG GAACCTCAC CAAATAAGTA GGAAACTAC ACTGAGAACA  
 ATTGGGCCCA GCTGTCTCTG GCCCATTTCC CTCTTACCG CCTCTTGTGC ATTCCAGCAA TCTAACTCGA TGAATGATCT  
 TCCAGTTGGA AAGATGGGGA CTTACAATG TGCAGACCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGTATCCTTC  
 GTTCCTTTAA ATGTGTTGT TTATTTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATAA AATGTATGNT  
 TAATTTTTTA GGGGACCATC ATACTGTTT TCCACAGTGG CTGTACATT TACAATTCCC ACCAACAATG CACAGGGTTC  
 CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCTTCTT TCATTTAAGC CACCCAGTCT ATGGTACTTC GTATGGCAG CCTTAGCAAA CTAAACGGA TTCTCATCA  
 GGTTCAGATT TTNCTAAATA AAATGTGTT GTGAGGGTGG TACAAGCAAC AGTGATATAT TTCTTTAAGT ATTTTCCCCC  
 AGCCAAATTC CAACAAGACA ATAATGTCTA ATGCACTGTC TGGTGAATCG GAAATCTCC TGAATGAAAT AAGAGCTCT  
 AATACCCAAA AGGGAATGAA GTGAGTCATC ACCACAGCCT GTGAATGAAA ATAACCTCTC TGAGGAAAAC ACATGTAAAA  
 AATGACACCA TGTGGATTAA ATGGGGNAC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

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TTCACTACCA AAACCAGTTA CAACAGTTCC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCAATC  
 CAACAGCATA CATGANITGG CTGTGGTCT GCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG  
 GATTTGGTTA TTCTCTACCT GATCAGAACA AAGGTAACAN TGCCTTACTT TACATTCTCG ACTACCGNTT GGCTGAGGGA  
 TTGTTAATA GAATGCCACA NAACCAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC  
 AGINTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTTCATAA AACATCCTTT ACTATATTTT NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNTTTAATGN  
 CTATAAGCAA GNCAAAGCAA TAGAATTGTG CTCTTTTTCG AGACTGGGNN CAATGAAATG TTTAGCTACA ATTTNCCCAT  
 ACAACATGA AACAATATTC ATATAGNNTA ANCACCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTTGACC  
 AAAGCAAAAA NTAAACTGAA AATTGTTGGG TGGGGTTATT CATAITTTAA ATTCAACATG CTGTCTCTAT TAAAAATAC  
 C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGCGA GGGGACAGAG CCCAGGGATG GAGGCGGGAT GCGGGGACA GAGCCAGGG ATGGAGGCGG GATGCGGGGG  
 AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAG GAAGAGAAGG ATTAACAGCG  
 TCCACTGCCG CAGATGGGCC AANCAGAGT GGGACTGGAA ACCAACCCT GCAITTAGCA TCCTGGGNC TGCTNATAAC  
 CTGTGTTTGA TGGCTCTCA AGAAGAGCCA NAACCTTNA AAGTTAGTTC AAGAGAGAAG GGGNGAAGAG AACT

SEQ ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAAA GTATCTCTAG ACAGCAAGGA AATAATTICA CGAGATGCT AAATTGATGT CAACACCTGC  
 AGTCTAAAT TTATACAGTT CAATATGTGT CATTGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTTGCTGGCC  
 AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAAA CATTGTTTAA CGTGGGAGCC TATAAAGATG  
 CAAATTCCTG AACACAGTG TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTGA TTTAACTGCA  
 AGATCTCNG CTNTTACGG GCTTTGTCAC CATCGNATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG  
 CTGCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTTGICTT TGTCTGGCCA TGTGGGATTT GACAGCCTCC CTGACCAGCT GGTCAACAAG  
 TCTACTTCTC AAGGATTCTG TTCAACATC CTTTGTGTG GTGAGACAGG CATTGGCAAA TCCACGTTAA TGGACACTTT  
 GTTCAACACC AAATTTGAAA GTGACCCAGC TACTCACAAT GAACCAGGTG TTCGGTTAAA AGCCAGAAGT TATGAGCTTC  
 AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTTGACAC CGTGGGATTT GGAGACCAGN TAAATAAAGA TGACAGCTAT  
 AAGCCGNTAG TAGGNTATAT TGATGCCAG TTCGAGGCT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GTCTCTTGA GCAAGGACCC AGTTATTCAT CTAAATTCTC AGGGGAATCT CTGTAGAGAT GAAAAGCAGG AGAACCAAGG  
 CAGCTGGTC TCCCTGGGTG ATGAAAAACA GACTAAGAGC AGGGACTTGC CTCCAGCTGA GGAGCTTCCA GAAAAGGAGC  
 ATGGGAAGAT ATCGTGCCAC CTGAGAGAAG ACATTGCCCA GATTCTTACA TGTGCAGAAG CTGGTGAACA GGAGGGCAGG  
 CTACAAAGAA AGCAGAAAAA TNCCACAGGA GGGAGGCGGC ACATCTNCCA TGAATNTGGA AAGAGTTTIN CTCAAAGCTC  
 AGGCTTAGT AAACACAGGA GNATNCACAC TGGTGAGAAA CCTACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

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CACACACATA CAAAATCTGT CCATTGCGG GAGNAATNG TATGTATGTA AGTTGGAGGG TATTAAAAAT CAGTTTTATT  
 CCAAAGATTT AAAACTAGAC ATGACTTAAA AACAAATTTCT GGAGCACTGC TTGCTGACAA TCTCGTAGTT CTCTGCTGCA  
 TTTGAGTGCA TTTTGTGGCC AGTCCATCAG GGGGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA  
 AGGATGTGTG AGGGACCTTG AACCTCAGCT GTATTAACT GTAGCGCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC  
 ANCCTGAATT CTGTGGGTC CTTCTTTTTT CCTTTATGTA GGCAGNCTNC AGCATG

SEQ ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TTCTAATCTA ATTTNCTTAT AGTGTGACTA AAAGGGAGGC AAATTATTGG AACGGATTAT TCAAATGGNT  
 CCTTAAATAT TGCTATGTAT AATAAGCCAG TTATTATATC AGGACCATGT TCTCTGTAGG CCACTGTTTT NTCTCTCAT  
 TCTCCAGTGG CGGCGCGGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCCAGCTT  
 GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TCGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTTATCACA CCCGTGTTTC CAAGGGTCTT GTTACGTACC ATTCAACATT CTGCTTAGCA ATGGCTTGTG AGATGGCATT  
 TATTCCTTCA GCATGTATTT TNATGTTTAC CTTCCTCTCA CCTAAATTCC TCCCCACCC CAATAACAAT TAGTTGTCTT  
 ATTGTCATGT AGCCAGAGCA AAAAATGATT TCTTTCCCTT AAGTTACTAT TATTATAAAA GGGACGATAA ACACATGAGT  
 CATTATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTGCGGCC AGGGCTCAAA  
 ATAAGGCAGA TTCAGATTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEQ ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGTAAGN GTTCCAGTTC GGTCCACTG GTCACAAATT TTTTGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT  
 CCAGTTCATT GAGCTTCTGC GCGATGGCTG CGATCTGCTC CACGCGGTCC TGGTGGCTG CCAGGTGCTT CTGGAACGNC  
 TCGTGCTTCC GCAGCAGAGC CCGNACCTCT NINAGCGACG CCGACTCGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC  
 ATAAGCCCAA GTCTCGTGGC TTGAGGCCCT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTTCC TGGACCTGTC ACAAGCTTTA TTGTCCCGAG CACAGACTCG CCACACTTCA ACAATTCAC TGTGGGGAGG  
 GGAGGGGTGA ATGAAGGACC TGGGGAGGGG ACATGGCTGA GCCACANCOG GGGCGCCACA CGGGCGGGC TGAGAGGCCC  
 ACGGAGGCAG AAGCTCCCAA GGAAACCGCT TCTTGACAC CCGTCACCAG GAGCCACCT CCGGGGGCTC AGNTCCTCCC  
 GGCACCTTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGGTGCCCC TACCGATGGG GCAGAGCTGC CTGATTTTGG  
 CTAGAAAGAG CTGTATTTGA NCTNGGTA GGNCACTAAA GCATCGTTCT AGACGGCTGT TAATAGAACT NCAT

SEQ ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCACTTTTC CACAAATCTC CAAATCTCCA GTCTTATCTT  
 GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAATCTT GTTTTCAAAG CATGGGGCCT GAGTGTCTC CACTCTCTCT  
 AAGAAAGGAG CTGGGGTGA AGGGACCATG CTGACCTCT CCATCAGAGG GCTCTTCCAG TAGTATTCTC GGATGCAACC  
 TCCATTTCTC AGTTACCAAT ATTCTCTGTA TCAGCTTTGT CCTTCTTGGN GGGATGCACA GTGATCCGGG CCACCACTGT  
 TGTGTCTGTG TGCTCTGCT CTTCCTATG GTTTCAGNT ATTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGTNTTTAA AGAGGGTCAA GTGGAGGTGC ATATCCAGA GAATGCTCCC GTAGGTACCT CTGTAATTCA  
 GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TTTTGGTGC CCAGGTGCCC CCGCAACCA

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AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANITCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTAC  
AAAGTGNCAG TGCTGGCTAG TGACGG

SEQ ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTGGATGGA TGTTTGATCT GTGTGGTCA TGAAGTTGTT TTTTTTTTTT TTAAAAAGAA AACCATGATC AACAGCTTT  
GCCACGAATT TAAGAGTTT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGTTA ACTAAAGGTA TTTGAGCTTG  
CACTGGATCT TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGTNCA AGATGGGCAT  
GAGAAACAGT GAGGTCCCN GCTGGAGGTG GGTGCTAGTC ATGTTGAGCA CTNCTGGCAG GAGAGGTTTT T

SEQ ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCACTCATGG CAGAAGGGAA GGGGAGCTAG TGTGTGCAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG  
GAGATAGCAG GCTCTTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA  
CTAGGCCATT AATGAGGSAT TCGCCCTAT GACCCAAATA CCTCCCAITA AGCTCTACCT CCAACACTGG AGATCACACA  
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACNTAG CAACTTGGAA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA  
TTTTNTCCTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEQ ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTTNT  
CAGCAAAACC TNGTAAACTT TGACGTAAA AGACAAATAT TTTGATCTCT CATTCCTACT CTCAAAAGG TTTCTAGTTC  
ATATTGTTTT GCTAAAA

SEQ ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTTCCCTGT GTGTCAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAGA GAGCCCAAAA  
ATAGCCCAAC TGATCATAGC CGTTGTAAAA ATATTTCATGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GCTCCTTGAC  
TTGTGATTG CTAAATTTGA GAAGCCATCA CTTACACAAC CTGTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA  
TGTCATCTAT CTCACCTCC ATCTCTTTT CAACTTCGA TAGATGAGAA GAAATGGTG AAATAAATTT TTTAGAAATCA  
GTTTTGCAAG ATTGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATTT CAGCTACTCA GAGTAATTGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG  
ATGGCTAACA GGTCTNCTG CCAGGAGACA AGTGGCAGAC CCAGGTGTGA AACTTTTACA GGTCCACCA AGCCTTTCTT  
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGTACT TGGAAACAAA AATACATACA CCTCCTTCC  
CACCTGCCTC CAGCTTAGTA GCCCATAGTC CTCCTTGTCC CTCACACTGA GCCAGGCCT GNCITTAGATG ATGAAATGCA  
TGGCCT

SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT  
CACATTTTAC TGCAATATGT GATTTCCTGG TGAGACTCCT TGTGCAGAGA TGATTAGCTC ACAGAGCGTT GTAAGCACGT  
ACTCGCAACA CCTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT  
TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANTT GNTATTTNC TINCTATTTT GAATGGTATG TACTGTCTGT  
GTGTACATA

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SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTTC TTINCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC  
 ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCG CCGTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC  
 AGGCCAGGAA GGAGTTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCCAGCCTC AGCTGACACA CACACAAAGG  
 AGCGTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTGCTC CTTTATTAAC TGINCTTCCT GTAGTGIGTA TTTGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA  
 GGNCTGTTG GGATGCACC CTGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTTTCTGT TCCCTGTGC TATAGGAGTT  
 AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GTGTATGTT TACAATAGCT GAAGAATTTT  
 AGGCCCATGC TTTATGGGGG AGGGTTTNC TAGCTAGTAG TCCCTTTCT TTCTAGATTG CAGCATAAGC GTGAACNCC  
 AAGGAATGCC ATATTTTAGA ATCCTGINAT AGGATGGITA AGGCTTTT

SEQ ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAATTTGG TTGAGAACTA CCGTGTGACG  
 TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACATA TTCTAGGATA TATTTAAAT ATATGTATAT  
 TTTGATATTA AGGGAATATA TTTTGTGTC ATTTTACAAT GTGTAACAC ATATATATTA NGGCCTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAATATT CTCAGTGTG GAAATATTTT NATATTGCCA AGACCATAAT GTGAGNGTG CAGCTGCATA ANTCCCTGAG  
 AGAAGATTAG TGGGCTAGC ACCTTACAAG GAAAGACAAG CTGTGTGGCT GGGCCCAAGG ACAGTCAAAT GTCTGCCGTA  
 CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAG GGCAACAAC CTAAGGCTGN  
 TATTCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGGCC TGGGCTAGGG AGACCCTCAG  
 GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCAITCA TATACTCATT CATTGAGCAA ACATGCGCTT GACACCTTCT  
 GTTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TINNCCAGGC TGGTCTCAA CTTCTGGGCT CAAGINATCC GTCCACCTTG GCTTCCCAA GINCTAGGAT TACAGGCATG  
 AGCCACTGTN CCTGGCTAGA AAATNNTTT TTAAGAGTNA GGATGTAGAA TTNCCTAGCT ATGTAGGCAA GGCAGGAGGA  
 GAGGGGCCCA GTTGGGAAGC ATAGCCACA AGAGTATGAG GGCTGANCC AGGATGGTGG CAACAGGAT GGAGAGGAAG  
 GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCAIT TTNAGCCAA  
 AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCTTG ATGGCAAGAN CTGACCCTTC CATCCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA  
 GGACTGTGTG ACTAATTCGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAACTG GTGTAGGTAG  
 TGCTGGCCAT TGCTCAGAAC TTGTGTGAG TTGAGCCAG GCCTCTGGT GCAGGACTCG TGAATGGAGC AGTCTGAGA  
 ACCACCCTTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCTTCAC ACTGGGTAAC AGTGTAGTAT CCTGTGAGAG  
 AATAAACGTA TTCATTTAAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

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TTTTGCCTTA TTCTATCCGA TTTTTCCTT AAGCTTCTAC CTGGNATTIN CCTTTGGAAA AGTCTCTGAG GTTCCACCAA  
 AATATGGAAC TINATTTTGG ACACTTTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGNNIT  
 GCCTAGCCCC ACTCACAGCG CCCACTGTAG CTTCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC  
 AAGAAGGTAC GTTCTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCAG  
 CTTTACGCC TTGCTGGCTG ANCTGACGNG ATCTCTNTCT GACAACATCA ACCTGCCTCA

SEQ ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG  
 GAGTGGACCT CTGTGTCTC AGTATTAACA GTCCCTTCTA GGAAGTAGGT AGCATTCTG AAAATAGAGT GAAGCAATTG  
 ACTGATGGAT TTAATCTTTA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAACTAG GTGCTATTTT  
 NCATGTGTG TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCCTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC  
 TTGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACGGTAA TTAATTCCT CTAAGGAATT NACCGTCTC  
 ATAGTGTGT T

SEQ ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTG AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTINAT GGGCCTCAGG GGAGGAAGTG  
 TGTGCNAAAT GGTCCGTGGG CAAACATGGG CGGGCCTGGA AAAGGCACCA CAAGTTCCCA CCCCAGTCAG TAGGATCAGC  
 AGTCTGACAC CCAGGCTTCA GGCCCTCCCC GACTTGAAGG TGGTGTCTCA CCAAGGACTC ACCCACTCCT GCCCAGGAGC  
 TTGTNTGCCT CCTGCTGCCA TTTATGGTGC CCAGGCTGTT TGINCCAAGG AGTGTCTGTG GGCCAGCNCT GAGCTGCCCT  
 CAGCACCCCC TTGGCCTCTT TTCTGINCTC ATTGGTGCCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TTGTTAAGA CCAAGTCAG ATCACTCCCT CCTAGCTCCA AACCTGCAGT GGCTCCCAAT TCINTCAGCA TACAAACCCA  
 GATCCTCAGG CTGCCATTIN TGGGCTGAAT CCTGTCCCTG CTGTCTGATC CCACCAGACA TAATGGAGGC CTGAGGTTCC  
 CTGAACACTC CTAGTTTAGC CTTAAGTTAA GTATTGTCAC ATGCTGGTTC CTATGCCTGA GATAATGTTT CACATTINAT  
 CCCATTGCTT GCCAGAAATA GAAACCCTTC CACATAATIN CAAACAGAG TTTACANCAC AGAGCTTTGG GTGACTGCAG  
 GCCTCCAAGA ANGNAGGCA GAAGGGGCAC TGAAGAGT

SEQ ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGTTAA ATATGCCAG GCTGAAAGAA GGTGTATAAT GTATGNCCT NCTTATACCA AATGATTTCT TTGGAATTTA  
 AACAAATATG TTTAGTATTT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGINCT GACATTGTAC ACAGATGAGT  
 AGCACGTAAC TTTTATTTAG TAAGCCCCAT AGGATAGTAN GGNATAAAG TTGTTAGTGA GCAAAACAGG AGTATCCTGC  
 CATTTGCTTT AATTCINCTT GTGATAGTTT TGAGGGTACA ATAATTCTG TGTGCGTGT ACTCAAGCAA ACCAGAAAGT  
 GTCTTTTGTA AATACGATT TTGGGCCTCA TCCTCATGGA GGTTCCTGTT GTTTGTGG

SEQ ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGACTCAG ACTCAGGAGG TGAATCAAGC CTCAAGCTCA GAAGCCCTCT GTNACCATCT  
 GTTGAATCAG AAGCATGCCC ACCATCCCAT GCAGTGCCCT TCAGGCACT GTCTGTAGC AGACGGAGTT CAGGCTTTGG  
 AAGTAGACAG ACCTGGGTTC AAATCACAGC TCCGCTTCTT CCGCTGAAG CTCCATAACC TAGGATAAAG TCGCTAAGCC  
 TNCCAAGTC TCAGATTTCT TACCTCTAAG GTGAANGGAT TGGATTCCAC TTTACTTCCC CCCTTTTCCC TTTANGGACT  
 CTGCATCCTC NITTGCTTG



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SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GTGAATTICA AGCAATTGTT AATGGGGACC AACAGGGCTG CATTAGAAA ACCACTTINN ACTGATCTCT CCCCCACATA  
 TTTTAAATTT GTCTTGCTTT GTTTATTTTG GTTATGCAAG TCCTTTCTCT TCATGAAACA AGTGTAAGGC TCTAAGGCTA  
 AAATAATAGT TATTTTGTG GGGCCCAAAT AGCTACTTTT GAATTTCTTT CTTTAGTATA TCTCAAATCT GGGGAACATG  
 GAACTTGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATTC ACTTTTCACA GAACCAATTTT CTTAAAAATA  
 AGGGGGCAAT ATCCAGATTC ACATGCATGT TCATAAATAA AGCTTTGGTT TTAAACAAA TCCACACCAG CAATTATTTT  
 CAGCT

SEQ ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNTCACAGA ACTCCAATTC TTTATTATC ACAGCTTGCT CACAATGACA TACAGGAAA TAGCACTAAT GAAGNGTAAA  
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGNTTCA AACTGCGAT AGGTACTTAT GGTGGGTATC  
 TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCC TTAAGTGGT CACTTTCACA GATGGNGTGT TTGTTGTG  
 GTGTTGTAG TAGGCAGGAT TGCCTTACAC TGGGGAAGAA AGAC

SEQ ID NO:1524: (Length of Sequence = 299 Nucleotides)

GTGCTGTAC GTGACAGTTT TGTCTGATCA CATTITAGGA AGATGATGCT GTTCTTNCCT CTTAAGTATT TATTTINATC  
 AGTCAAGTGA TAGGAAGTTC AATTTCAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTTAT TTNAGATGGA  
 GTCTTGCTCT GTTGCCCAAG CTGGAGTGCA GTGGTGTGAT CTCAGCTCAC TGCAACTTCC TCCTCTGGG TTCAAGCAAT  
 TCCNCTGCCT CAGACTCCCG AGTAGCTGGA ATTTACAGGC ACCCACGGG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

GCCCATGAAG CAGCTCTCGT GGAITGGAGT CTCATGCCCTG CAGCTCTCCC ATACTGGAGT TGCAATGCTGG TGGTCTTACA  
 GTGCTGGTGT CTGGGCAGTG GCCTCACTCC CATGGCTCCA GGAGGCATTG CCCTGGTGAG GGATCTCTGT GGTGGCTCTG  
 TCCCTGINAC AAGTTTCTGC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC  
 ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGCACCAT GTGGACACTG CCAAGACCTA CCTACCACCT GTGCTCTCTG  
 GAGCAGCAGC ACAAGCTACA TCTGGGCTG CTTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCTGA GGGTGGCC

SEQ ID NO:1526: (Length of Sequence = 318 Nucleotides)

GTCTCTCTCT ACTGCACCAT GATGCCTTTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CACGCCINTA ACCCAGCACT  
 TTGGGAGGAG TTCATTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCCGINTCCA CTAAAAATGA  
 AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGAAG TTGAAGCAGG AGGNTCACTT  
 GAGCCAGAA GGTCAAGGCT GTAGTGAGCC ATGATTNTGC CACTGCATTG CAGCCTGGG AACACAGTNA GACCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TTGGCTAGAA GGGAGGCTGG AGCCTTTCAT GGTGGCTTTT GAATGCCATG GTGAATAGTT TGTCTTTAT TTGINATIGA  
 ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAATGA TTAAGCCTGT GGTTTAGGAA GAAAGAGCCT ATTAGGGAGA  
 TAAATCTTTC CCTAGTTGTA GGAAGGGTTG GAACAGTATG ATATGGAGAG GGTAGTAATG AATGANGGAA TNGAAAACGA  
 GAATAATTTT AATGATACTG GAGGTGCACT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEQ ID NO:1528: (Length of Sequence = 405 Nucleotides)

GCCGTGCTA CGCCACCGC CACCGCCACC GCCCGGAGT GCTGTCTCTA TGGCGAGGAG GAGGAGGAGG AGCGCGAGTC  
 AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

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ATCTAGACTC CCTTGTGCCC TCACTATGCC AGCGGAACTG TAGATCATAG CCAAAGAATT TGTGAAGTTT GGGCTTGCAA  
CTTGGATGAA GAGATGAAGA AAATTCGTCA AGTTATCCGA AAATATAATT ACGTTGCTAT GGACACCGAG TTTCCAGGTG  
TGGTTGCAAG ACCCATTTGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTT GGTGTAATGT AGACTTGTTA  
AAGAT

SEQ ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTTCTTGC CTCCATAATT CAGACAGTAA ACTGATCGCT GAGATTGAAG TTTGCTTGTT TCCTGGGAA  
GCTTNAAGAT CCTCGTGGGA CCACCATCCC CTGCTCAGTC CTCCCTGGAA GGGGGCACTG GCTGGGTATG AGCCGCGTCA  
CCGTGGGTT TGTAACTTTN TGGATGGTGC CTGGNTTCA CCTGGGGCTG GCTGAGGAAA GGGGAGGCGG TAGGNGTCTG  
C

SEQ ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTCC CATGCCTGTA AGTGTGTTTG TAATCCACACA TGTATCAGGT GCCTGGCTGC TCTGGGACTT  
GCAGTAATTG TCCTTGTGTT GTTTCAGGTG TGATCCCTG GGCCCGTTTG TTGTGGGGG AGAAGACTTA GACCTTTTG  
GGTAGTACT GCTGGGGAGG TGGCAGCAAC ACAACTTGCT TTINTGGCTT TTNAGCCCCA GCTCATCTTC TAATTTNAGA  
GTTTTGGTTC AGTCTCTTCC TTTGGGNGTN GAGGAGGCG TGTGTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT  
GGCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEQ ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGTT TCCTTCAAAA TTGTTAAACA TCTCTTGGG AAGAAGCTGC TTAGTTATAT CCAGCGATTG  
GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTACGC ACTGGGTGAA AAACAACCAG  
AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTGAGAT TGCTGGACTT TGTATGATC TCGGTCATGG GCCATTTTCT  
CACATGTTTG ATGGACGATT TTATTCCACT TGCTGCCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT  
TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGAACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTTG AGCCACCAAG AAGTGGACTC TGCCTAGGAA GACAGTTTGC TGAAGTTAGA AAGTACTGGT CTAGGAACCA  
GAAACCTGA TTCTNCCAA GAGTTAGAAT TGINAGINAG TTCTTNTG TTTTINAGTTT CCTTATCTGT AAAATAATTA  
CCCAGTTCAA TTGGATAATC TCTATGATCC CTTCCACATT CTGCATACCT GGATATCTAC TGTTTCTAAA TATTTTGGCA  
TTTCTTATAA AGCCCTTTCA CATTTNTTTT ATTATTTTTC CCTACAAGA ATTCTTGAAA TAGGATA

SEQ ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGGCTTTAT TTGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTTACATATC AGTGACCAA TGCAAACATA  
CCCGTACTAA CAGTGCTTTG GTCCATGACA TACCCTTTTG ACAGCCCAA GCTGAAACGT CAACTCTATC TGGGGTTACT  
TGCTTATACA AAGATGTTAC TCTAGCAATT GTTGCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA  
AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTCTTAAAC  
AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGT GGGTACTACG TTAAATATT TAATTATTTT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGATTT  
GATGCTCTGA ATAACTTTAT GAGTGAATAG ATACTGAAAT TTGAAGTCAG TGTTTTCAC AACAAATCAA GATTTGGGAC  
TGGACTTACT GGGTTGGGGA CTTCCTAGGG ATAACGGTGG TGCTATGAGC ATGCTGGAAA GATGAGAAGC AAAAGCCTGG

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AATTGGGAGT CCTGTACTGT CTTTAGGGTA TGCAAAGAGG CTCCTTCTTT TCTAGGIGTT CATCAGTACA ATATGAC

SEQ ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTAAAGATG GAGTAGGACT TTNCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG  
AAATACCATT TGTAAAGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA  
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG  
TAAGGCTTGG GCACTNTGGA GCCCATGAAG GTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTATNAAG CCATAAACCA  
AAT

SEQ ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATTT TTA CTGCATC TNC TCACGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA  
CAGGTTTTTC CCTTCCCGT CATGTACATT AITTTATTTT GATCTACTC ACTGTCCCAA GTCCAGAGGC AGTTACAAAA  
AACACTCTTG ATGCAAACCG TGAGTGGCTA CAACACACCG ATGGGGTGG GCGCGATTCC CACAACAGGG AGTGAATCC  
GGGAAGATG ATATATAGGG GCAAGACGGC CCTTACTTT GCTAAGAGTA TATGGGAGCT CAAAA

SEQ ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGGCGCGC GACTGAAGCG CGGAAAAGC TGAGGCGGCA ACGTCGGGA CGGCTGCGG GGACGGCTCT  
GTAGGAAGGA ACTTGGTTC CCTCCCTCA GCTTCGCCC CAAAAGATT AGAATGGACA GTTTAGAAGA ACCTCAGAAA  
AAAGTCTTTA AGGCTCGAAA AACGATGAGA GTNAGTNATC GTCAGCACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT  
NTTGAAACT TGATGCAAG CTGTTAAATN GCAACCATG

SEQ ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTTCCTT CTGCTCTGAC TCCGGAAGAA CTGCACTGT TGCCTAGGCT GATAATCCCC GAAAAAAGT AACAAATGCA  
ATINTACCCC CCACCCCAT ATACAGCCT CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGCTTC  
TAGGGAAAAA AAATTTCTAC TTCCCTAGCC ACTGTAGTCA TTTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC  
ATAGAGTTCA ATTAATATAT TTCTGCTCTA TGCATGGATG CTAACAGGTT TAAGGAAACA CAAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATTTTAC TTGTAAATCG AGTAATTTAG CCACACTCTT GTGAGGGAAC AAGCCAGAGC CAGGACCGCA TATTACCCGG  
TAAAGCTGCA GAGAAGACTT GAGACTGTGA AGATTGGNCC NGGCTGCAGT CCGTGGTCA GTAACATCTG CAACATTATA  
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAAATGTC TTCACACATT GCACCAGTGA TTCTTTTCCC TGINTCTCTC  
CTTCTCTGGG GAAGCTGCCC TTNAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTTATTTCAG ATGAAAAAAA ATCAAGGCTT AATTAAAGTA ACTTGTCCTA GGTCAAGGAG TTGACAAGTG GCTGAGCTGG  
AGTTCAGCAT CTCAGACATC TTCTTTGAA TCCTTGCTT CCTTGTAAT TTCAGATGAC GGAGCATGAC GGCTGCATGA  
TTATGGGGTC ACCGGGCTG TCCTGGGCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CAACTCGNTC AGCTAGTGAA  
AGTGCAATTG GACANTGATC CTGTTCCGG GNTTAACCTT CCGCTGGCC TTTAAGAGGG NITCTTGAAA TGCACCAAGG  
GGGCTAGAG GAAGCAAGCA AACINCTTGG ACCT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

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GTGATGTTAT ATCAGGTAAA ACCTGTCTAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT  
 TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATATGAGT ATTGCTATAA ATATAATACT TTTACCTTGT  
 TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT  
 TCATTAAATTG CCTTTCACIT AACTTTTGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCTTA  
 CAAAACCACC AATTAAAATC AAACAACCAA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGGTT  
 CAT

SEQ ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTTTATAAA AACATGTCAC GCCCGGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGGCCGAG  
 GCGGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAACCGGT GAAACCCGTC TCTACTAAAA ATACAAAAAA  
 TTAGCCGGGC GTGGTGGTGG GCGCCTGTAG TCCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCCGAAGG  
 CGGAGTTTTC AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG  
 GNAGTACAAT CCT

SEQ ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCTGATAA ACCTATCAGA TTCTGTGAGA CTTATTCATT GTCATTAGA ATAGCAGGGG AAAGACTGGC CCCCATGATT  
 CAATTACCTC CCCTGTCATC CTTCCACAA CATGTGGGAA TTGTGGGAGA TACAATTCAA GTTGAAATTT GGGAGCGGC  
 ACAGCTGAAC CATATCAGTC TGTATTATCT CTCCTTTTTT CTGCTTTAAG NGAATATACG NAGGTGTTGT TTTAGGGNT  
 TATACATAGG TATTCTGAAA GATGGGGTTA TTTCTGTTT CANACTTTGA CTAAGTGGCT TCTTTGTCC CCTATGTGCC  
 AGAATAGCC

SEQ ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCAC ATCCGGGGAC TGGGGCTGGA CGATGCTTG  
 GAGCCTCGGC AGGCTTCGCA AGGCATGGTG GGTCACTGG GGCACGGCG GCGGCTGGC GTGGTCTGG AGATGATCCG  
 GGAAGGGAAG ATTGCCGTC GGCAGTCCT TATTGCTGGC CAGCCGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG  
 CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATGCG CGGCAGTNA AATCTTCTCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCCAACCT GGAGCTAAGA ACTTCATCTC ACTTTTGACA CCCAGCCCC CAAAATATGG AAGCCAGGA GAGCCAGGAG  
 AATTTATAGC AGAGGCTTAA AGAGAAAGTT ATGATTGTT TAAAGTAGAG AATAAGGTGA AAAATAAAC CTGGTACTCT  
 GTCTGGAAGT CCTGGAAGTC TCCTTGCCA ACCTCAACTG GCCTGTGGC TCCTGTTCC TTGCTCTGGG ATGCCATGGT  
 GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCTTTCGG TTGCAAGGCG AGTCTTTGC TGAGCCAGC  
 CTGAGACCCA GCTTATGGG TTTATCCAGG TGAGAAAATN CTGGGGACAT GTGTTGAGG TTTA

SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAG TGAAAATNCT CTCAGTTTTT TTTAATTGGT TCAGCAATTG ATTAATTACT GAATCTTGAC  
 CCTAACTTT TTAGTCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTGA CATGTGCTTC CCTCCTGGN  
 TCACATCCAT GTTGGAATCA ATTTATAAAC TGCCTTCTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCCCTCCT  
 AGGCACAGGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTAAAGGGA AACTGAACT CATGGCAGAA ATGGTGGAAA  
 GTAGAGAAAT GAATAGAGGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

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GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCAGT GAGCTGTGAC TGCACCACTA TACTACAGCC  
 TGGGAGACAG AGTGAGACCC TGTCTCATAT ATATATATAT ATATGTATGT ATATATATGT ATGTATATAT ATCTCTAATA  
 TATTAATATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATTNCC NAGAGAGGGA  
 GAGGCTCTTA GGAAATATC TTCTTGCAAT TTATGTATA TTATGCTATA TTTGGCTATT TCCTAAGAGC TCTATCGTAT  
 TATTTCCATT TATTTGTGAG GA

SEQ ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT  
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA  
 TAGGTTATCC TTGGAGAGTA TCCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG  
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNAIGATAAT CTGAATTTTC AGGGCTAGGC  
 TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC  
 AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGINTG GCAGGACAAG GGCCCTGCCG TACATGCTAT GCATGAAGGA  
 AAATCTTGAG ACTAAGACTC ATGAAAAGNT CAAAATAAT TATTTCTGTG GGCCCTAGA AGACTNAAGA GACATTTNCT  
 TCGCCATTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT  
 GAACACATGC TTCCCGGAGC TCGTCTNCAC AGCATCTTCA CC

SEQ ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAGAGG TTTGTACAG CAAAGAAAC TGTCACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA  
 TTCACAACT ATGCACCCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAA  
 CAACCCATT AAAAGTGGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA  
 AAAATGCTG ATATCATTAA TTATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTT CTTCTGTCTA GGNTAATTTA  
 TTTTAGGG

SEQ ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA CCTACCTATG GCAGCTCTCG CCGTCGGGAT TACTATGACA GAGGATATGA TCGGGGCTAT  
 GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA  
 TCAGATTTAT AGAAGGCGGT CACCTCTCC TTAATATAGT CGTGGAGGAT ACAGATCACG TTCCAGATCT CGATCATACT  
 CACCTCGTCG CTATTAAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTIN  
 ATTGTCTCTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEQ ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTTACTGA AATAGCAAAA ACGTGGACTT TGGGATTTCC TCTAACTGCT GCAAATTATA ACACAGAATT  
 GCTCAGTGT AATACTTGAN TTGTGGGGCC AAGTCTTCTG GCTGCCCTAG TTCTCTTTT TGGCATTTGA AAGCCCTTGA  
 GCTAGCTATG GAGCTAATCT TTGGACAGGC TTTTGGTTC CCAGGAATGT CATGCCTTTG AATTTCCAAT CTATATATAT  
 ACASTGTGTG TGTATGTATA NCTGTCTTTT CACTGTAAGG CACCTNCACC CATCCCTTAT AGAAGGNGGC CACAAACAAT  
 CAAGCAAATG

SEQ ID NO:1553: (Length of Sequence = 304 Nucleotides)

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CCCTTGTCAC ACAGCCATTT AAAAATCTTC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTTAAAAAG  
 GAAATGCAAG AGTAGGNTAC TCCAATTCCA GAGTCTTTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG  
 GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC  
 ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGTGTTACTG ACCATGTTTT TGAGAGTAGT GCCCCTAACC ACTTTGTCTC CACTTGCATA GTGTAGTGAT TTTNAGGNCT  
 CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCCA TAATCAAGCC AATTCTTCCA GAATATTACC  
 ATCAGTATTA CCACATACAT CCTCCCAAAT CTATTTTCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC  
 AAAACTACTC AACCAAAACC TTGAGGAAGG TTTTCCAGG GNTTCTACC TTAATTATTC ATAATGATT

SEQ ID NO:1555: (Length of Sequence = 326 Nucleotides)

GTTTAAAAAC TGTCCAAATG TCATTTTAAT TTATGAAGGC ACCCAGAATA AGTNCTAATC TCATACTGCC CCAATATATT  
 TNCTGAAGCC AATTCTCTCT TTTATTAAIT TTTACTGAAA ATAGCACTTT TTTCTCCCC CTGATAGTAC TGGGTAATGT  
 TAGAATGTCC TCTAAAATTC TTGGACCTT ATTTACATTC TCAAGAGNIT TTTTAAATTT TACCAATAAG ATGTGCTATT  
 TGAGGAATTA GACTTTAGTT CAGTTGTACA TGGNTTATGT CTGCTCATAT CATTCATGTC TGAGNCTTTC ATTTTATTAA  
 TATGGG

SEQ ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TTTAGGTGCT TTGTCTCCT TGAGGAGCCT CCAATGCTGC TGCTCCTATA CATGTCACAA TTTCAGACCC  
 AGCATGCTAG GAACGTCTGC CAGCGCCTGG TTAAGCCAAT ACTAAATGGG GCCAAACAGG TGAACAGACA TTCTGTCTTT  
 CTCCAAACCT CTGAAAAAGA TTCTGCAACT CATCTCACAG TAATTTGTTC CCTAATTTAC TCTTAGGAAA TTGTCTTAA  
 AGTCTGATTA GGTAAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTATTTTT  
 CTTTTCTATA GCTCCAGCAT CAGTAATTGT ACCATTATTT TTGGCAGCTC TGGGG

SEQ ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCOGAAG ACTATTCTTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA  
 AAACGGTGGA ATTAACTAG TGGAAACAAG GCTTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC  
 TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCAATGCTG AAGGACCATG TTCCCATGAG TGACACCCCT  
 CTGTAAATGT GGTGGCACAT TATGGGCTGC TGTTTTAGAA GGGACTGNCA ACTTGCTGGG GGTTAT

SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCGCCCT TTCCAAATGT ATTTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCTTC TAACCCAGGG  
 TTGCCCATTT CACCTTAAAA CATTTTTCAA TAACCCAGAA AAAACCAGGN TGAACATACC CAAGCTCCGG AACGACAAA  
 TMTGTGTTGA ACCCGCTGA TGAATCCAG GGGAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG  
 NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEQ ID NO:1559: (Length of Sequence = 246 Nucleotides)

GTGGTCCGTT CTCAGCCCAA CAAGAGTGAT CCTTTTAAGG TCCACACACG CTGCCTCTCC TTCTCCGCA TGAGCCTCTG  
 GCATGGTCTT TCCTCAGCT GGCCCCGGGC TGGGCAGAGC CTCCTCTGCG CGGGGCCCTT GCCCAGCCCC TCCTTTGCTT  
 GGAGTNAAGG TGTTTCATACC AAAGACGGAA CCATTTCCGC TTTAAAGAAA ATATATNCAG AAGCAGCCGC TGCCTCGNAG  
 CCTGG

SEQ ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTAA CTACATTAA GACAGGAATC TTTTCTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA  
GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG  
TTTCATTAC CACTATTCTT TAAAGTNCCT TTTGATTTTA TGTTTTAAAT TTTTAAATTT TATATTTTGA GACAAGGTCT  
TGCTCTGTG CCCAGGCTGC GGGGCAGTGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC  
CCATCTTAGN CTCCTGAGCA AACTGGGNC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEQ ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCTGT GCCCCGTCC CCACCACCAC CTTCCTCAAC CACTTACAAC TGCCCCAAGT CCCCAACTCC  
AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCGNCA AGGTGTCCCC CGCCACCAGG TCCGACACCG  
TGGCCACCAT GATGAGGGAG AAGGGGATGT ACTTCAGGAG AGAGCTGGAC CGCTACTCCT TGGACTCTGA AGANCTCTAC  
AGTCGGAATT NCGGCCCGAA GNCAACTTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEQ ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCG CGAACCGCAG TATCATGCTG GCCAAGAAGA TCATCATTAA GGACGGAGGC ACGCCTCAAG GAATAGGTTT  
TCCTAGTGT TATCAGCAG TTATCGTCAT CTTTTTGGAG TTTTGTCTT GGGGACTATT GACAGCACCC ACCTTGGTGG  
TATTACATGA AACCTTTCCT AAACATACAG TGTGTAACAG TTCTAATACA GCAAATTTAA TACAATTTTT TATTAGATCA  
AAATTCATA GAATGTTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTT ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTCACCTGC CCGTACGAT TACATTTTCT TATAGTTTTT TGTGATTCTG CCTGCATTAA  
ATCATCATCA CCAACAAAA TAGTTCCTCT GAAGAATTAT TTTTACTAG GATTCTCAGG NTATCTCCTC TCAATCTCTA  
TTGGGATCAC TCCACTCTGA CTGTGACACT CATTTCCTCA CTGATGTAGC TGTTCTCAAG TTAGAAGTTA AGTTCTCAGT  
CTTCATTTTA TCAGTCATCT CAGCAGCATT CATTATGGTT CAGGCACTCC CTCCTATTT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGNTC AGTTCATACT CTGGCAGTTA ATTTTATTTT CTCTAAATAA AAATGGACAG GTTAATTTAT TAAGCAGCTG  
TGTTATCAAT ATGGTACGTG TGTGTNCTTG TATAGATAGA TGTATATGTA CATAATAAC TATACATTTT NCTGGACACA  
TAATATTINA GGTGCTTATT GTATGCTAGA CACTGTCTTA CCATCAGTAA AAAAGCACTG CCCTGTTTTA CTGTTGATTA  
AAAACAAAAT TCTGAAAATA GTGANCAATG AGGCTTACAA CATTTGTTAC AGGNTAAGGN ATCTCAATTT AGGAAAATGT  
TGTC

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTA TATTAGTGCC TGCTTTTTAA AAGTTTATTT TACATTTTAA ATACAGTATT TTTCTCATAA AAAAAAATC  
CAGGAAGTGC CTAATCCAT GGTTCCTATA CCATATGTAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGTA  
ACAGTATGAA CACCTATGAG CTGGGACTAC TTCTGANTCA AAATTAATAA ACACAAATTA AGCACTGCTT AAGAAAAAA  
AAATCCAGTT TCTGAACAAC CAAAAGAGAA CAGAGTTAGA TATGTACAAA ACCAGGTATT AAAAANCAGN AAGGAATACA  
GCACACAAA ACTCAACAN CCCATATGTA GTGAAGTGA TACTCTGAG TTAATGAAAA CC

SEQ ID NO:1566: (Length of Sequence = 305 Nucleotides)

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GCACTGTGGC TAAITGTAGC TCAAAGATC TGCAGAGCTC CCAGGGCGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC  
 CCAGTGAGGG GTATACCTCA NITACCATGT GCCAAGCAT TATACAATA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT  
 CAGCAAAGGT GACATCATCA TTTTNCGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGGA AGTCAATGGA ATCCATGGCT  
 TTTTCCCCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCC ANCTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTTCCTTG GGAAGACAA CATCACCAGC AAATGGATGA TTGTCAACTG GGGAGCCATT GACTCTCCAC TTGATTGTGG  
 GTTGAGGTTT TNCCTCAGCC TCACATAACA AGATGCCATT GCTTCCGGTG CTATACACAG CACTCTGAGG CTTCTTTGTC  
 CAGCGAGGAG GCTCTTCTAC TATAACGTGA AAATCGTGAG TGGCTGTGCC CAAGAAATTG CTGGCTGTGC AGCGATAATT  
 TCCTTTGTCC TGGTAGGAGA CATNCTCTAT CTTCAAAGTC TTGCCATAAT TT

SEQ ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTTGAACCC AGGAAGCGGA GGTTGCAGTG AGCGAGGTC ATGCCACTGC  
 ACTCCAGCAT GGGCAATAGA GCGNGACTCT NTCCCCCGG AAAAAAGAA CAAGGGCTAA NITCAAATCA AATTTTCCCT  
 GTACCCTAAG AANAATAATT AGGNCGGGAG ATGTTTGACT AAGT

SEQ ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAACAC TAACAGGAAC AACTCGTATT  
 TCCATTAAATC AAGATTTTAG TATACCAAAT TTTCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTGTATG  
 CTACTGAAGG GNAAACATCA TCATACAGCA ATGAATACTT CAAGGGNCIT GTTGATCTCT CTATTATTGA CAGTGGGGTG  
 TTAAAGTCTC CCACTATTAT TGTGTGGGNG GCTACANCNC TTTGTAGGGC TCTAAGAAGG TGTTTATGA ATCTGGGGGC  
 TCCTCTTTGG GNGCATATAT AATTTAGGGT AGTTAGTTCT CC

SEQ ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCTNITGT GGTAGAAGTA AGAAGTGGGG TACCCTCTGG AGGAAGAGAA TTNCTTTGA AGTGGCATGA GAGGATTTT  
 TTGGCTAATG AAATTATTTT NATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TNCAAAACAT CATGGNACCA  
 TTCATCCAAG TCCTGTGCAT TT

SEQ ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGTT GTAGTTACTG CGTAACTTTA TTTATGAGGC ATTTTAGAAT AGGCAAACT  
 GATCTGTGTG GGTAGAAGTA AGAAGTGGGG TACCNCCTGG AGGAAGAGAA TTNCTTTGA AGTGGCATGA GAGGATTTGT  
 TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TGTCAAACT CATGGAACCA  
 TTCATCCAAG TCCTGTGCAT TTTACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GAAAAAATA CTTAATTATA  
 ATATAGCATT TATGNATTAA AATAATCCCN TTATGTAAAA ATATTTTATT GGNITGGTCA AGATTTCATGA TTGCAACCA  
 CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGGCC AACCGCAACA GCATGGTGAG CAGAGGCATG  
 ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGTN TTCCAGTATC CAGGAGCAGG  
 AATGGTTCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCCGATGCCA ATCCCTCCTC  
 CTCAGAGTTC TCTTCTCCAG CAAACTCCAC CTGCCTCCGG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC



361

GATAGGAAAC AACAAATGTGT TCAGTCAAGC TGTCCAGAAC CAGNCCACGG CTGCACAGCC AGNGTATAC AACAACTGA  
GCATCACCGT TTTCCAT

SEQ ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAAATAAGTT AGAAACATGA AAAATCTTA GAACTTTGA TGAAAAATTA AATTTACTAC TAATACCCAC CTGCAATAAT  
TTCCCGTAGT TTGGGATCTA GGTTTACAGT GCATGGCAA AAGACTTTTA CATCTCGAGC CACAAGAACT GGGGTCCTTG  
AAGACAAAA CACTTCAAAA TTTCTTATAT CTCCATCAAT TTCAAGAAGT GGCTCAACAT CCTTAGTGTG TGAATATTTC  
TTTGATATTC TTTCGTAGAT GGTTTTAAAT GTCATTTGAT CTGGAATACC TTCAGTCTCT TCCAAATATA ATATGAGNCA  
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTTTAAGC AAATGTTATG TTTAAAGACT GTTTTATGA AAACTTTTAG AATTGAGTTA GTAGCAGAAT ACATAGCTAA  
ATGTACTTTN CTACAAATAG AATGAGATAT TTGATTTAA ATATNCTTT CCTCTTGAAA TAGGATGTTA GATAGGGACA  
TCTCATTTTA CCTATCAAGT TCTGAGTCTT GCTTTAGAAC TACTTCTTTT AACTTAATIN CATGCATACA CTGGAAGACA  
ATAATATGGC TTTTAACTG CATTATCTTT AGTTGAAACT GATGGAGAAA CAAAATACT GCTTATACCA TATTGGGTAC  
ATGCTGAATG TTTTAAAGA CTAGCCAAA CTGACATTTT TTAAATTAATA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TTCGCGGCA TCTGCATGAT GATCGGTGTC AACC CGGGG GCGTTGTGCA GGTGGGGCA GCTGGGCTCT  
NAGGGCAGGC GCGGCGNCTG GGCTCGGGCG GCCCTCACC TGGGATCCGT CACGTTTCAG GACTTTATTT TCTTCTTCAA  
TGNTGTAGCC TCCTGGGTGA GCCCGAAGAT NACCTTCGGG ACATGTTTAA TAAGGTGAGG CTCTGTCTGG GCCCTGATCT  
AGTTCCGGGA GCAGGCAGGA NGTGAGACCA TCTGTAAACA ATNGGGGCTN GGGATT

SEQ ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTTTATGAAG TAGTAATTC TGAGAGGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCCTGENT  
TTAGACATGC AGGGGTAAAT CAAAATAATT TAGGAGCGTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCGTGG  
CGAGAAGAAA ACCGTTGTTT AGGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC  
TNITTCGAGG ACGGAACCCG CAGCCTNGCT GINTCCAGC AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTC CGCCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCCTATTT AGTCATAATG  
CCTCCCCACC AGGTCTAGCT TTCAITCATC CATGAACCT CACCAAGGG CCAAGAACTG AGTTCACTGC ACCCTGGACC  
CCTGTTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTT CTCTCCTAAT TTINTTGCAT CCCCTCAGTG CCCAGCACAG  
CTCCGGATAC AGGGCAGGTT CACAGTCAGC GGTTCACCT GGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGTTAGAG CCATACCAGA GAAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGA GGCTGTGAGA  
AAAGGTAAAC CCTTCTTAA GTCATCTGC CCTTTAGTT ACCACTGGCT GTCTCACTCC TGGATTTATG TGACTCCCTT  
AGCTATACTT TCCANCCCC CTGGGATGTT CCCACTCAT CCTATTCACT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)

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TTGGTCCTCA AGTCCTATTT TAAAATTTTG TCAATTAGAG GACTCTTGGT TCTCTTGGTT GACTCATTCT CTGCTGATTT  
 GTTCTCTGTA CTTCAGCAA ATAAAGTGCA GTCATTGAGA ATGTCCTGT GTCAGTGTGA TGTATCAAGG GATCTTCATG  
 TTAATATCTG TTTCTCTGAC AACTGTGTTT TATACTTTGT ACTGTAGCTT TCATTGGAGA AGCCCTGGGC TCATAAGAGT  
 GATTTGTGT GGCATTTCTT TATGGAACAT AAGCTTTTGA AATATACTTG AGGTAAATAT TCATGGGAGA CATCCAAATG  
 CAGTAATGAG AGTACAATGA AGACAGCATT TTNGACTTTG GAAACCTGAG TTCAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCTNCTGATG CACCCATGAG AGGGGAGACA GCACTGTCTG CTCTCGCAGT TTTCCCTTAA CACTCCCTTA TCTGCAGACT  
 TAAACTAGGA GCCCCTGGCA GAGTCCTACC TCCAGAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT  
 ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCCTGGCCC AGCCAGGAT AGATAGGGAT  
 GGGTAAGAAG CCCTTNAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTGAGATTA GGGGTTTTAT AGGGGTTTTT  
 TTAGC

SEQ ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAGTTTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTTGAAGTG GCTGGCCTGA  
 CATCCTTCTC CTTTGGGGAA GATGATGACT GTGCTATGT CATGNTCTTC AAAAAGGAGT TTGCACCTTC AGATGAAGAG  
 CTAGACTCTT ACCGTCGTGG AGAGGAATGG GACCCCCAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGGCCAGGA  
 GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTN CAGCCACCTC  
 ATCGGCAAGG GAGCAGCCAA AGACGGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTCC CNTGGCCAAT  
 AA

SEQ ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTTGA TTAACAACAA TAATTGAAAT AAAAAATTAT GTTTATNCTT ACATGTATGC CATGTAGCAC TTTAAGGAGA  
 TGAGTTTATG AAATTCATGA ATGAGAGGAT GATGTAAGTT TAAAAATCAT TATTTTAGTT GCTTTATTCT NCTATTTTAA  
 ATTCAATAAT AACACAGGTG GCCTGTATTT TGAAAAGAGC CCTTTCCTCC ATTTGANCIT TATAAACACT GAGGCAGTAG  
 GTGTAAATA TTATCTCCAC TTTATATTTG AAGGAAATGG GGGCCA

SEQ ID NO:1583: (Length of Sequence = 323 Nucleotides)

CIAATTTTGT TATTTTATAGT AGAGATGGGG TTTCACCATG TTGGCCAGAC TGGTCTCAA CTCTGACCT CAGGTGATCC  
 GCCTGCCTTG GCCTCCCAA GTGCCAGGNT TATAGGCATG AGCCACCAGC CTTGGCCTTC CAGTTGTGAC CTGTGTTAGGA  
 TACTGCTTTA ATTCATTTTC CCATTGAAAA TAAGCATGAA AATAACTGTG CAGTCATAAT TGTGGTATTT NCTGTNAAGG  
 AAAGTGGCAG GGCTCTGAGT GTTTATCGGG AGACCTAACC CAGTNTCAGA GGGGAAGTCA GAAGGCTTAC TNCCCAATGG  
 GGG

SEQ ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTTGT AAATCACTTT ATGTTTCTGA GTAAGGAAGT AATGAAACAT ACGTACAAGT AATCAGTAAG ACTTGTTAGA  
 CAGCTGTTGT TCAGGATGCC TTAAAAAGG CTGGTAATGC AGTTACATTC TAACAGAGAA GTCCAAACTA CAGGTAAGAA  
 CTACGGCTTG TACTGTGAAA AATGTGCAGC TTTTCAGTTA TAAACTAGT TGAACACTGG TTTACAAGGT AATCGTAGG  
 AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGTT GTGTTTTGGC AGCAGCATTT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)

363

AAATACTGAT TTCAGACCTT CTGCTCTAG AAGTCAAAT ACTTTCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG  
 AAACACTGGA AGAGAGATCT GGACTCCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGTCAGGAA  
 TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCCAGGG CCAGCAGGGG GCCAGCCTTN TTGACAGGG  
 GCAGGGGAGA AAAGGCCAGA CTTCCTATAC ACATGCTAGA GGGGAGGGCT AGTGTGAAG GGTAAATAGT TGAAGGAGTC  
 CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCACTT TGAGAAGAGG AGGAAGGAGT TCGAGGTGAT CGCCAGATC AAGCTGCTGC  
 AGTCGGCCTG CAACAACCTAC AGCATTCGCG CAGATGAGCA ATTTGGGGCC TGGTTCGGG CCGTGAGCG CTCAGCGAGA  
 CTNAGAGCTA CAACCTGTCG TCGAGCTGG AGCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA  
 GCCATTNTCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACACGAGTT TCTGATTAAC ACATTAAAGA ATAATCCAG GGACAGGATG ATACTTTTGA  
 AAATGGAGCA GGAAATATT GATTTTCATTG CTGACAACAA TAATCATTTAT AAAAAGTTCC CTCAGATGTC ATCGTATCAG  
 AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGNAAATCTG TTATCATCAA  
 CAAGNCCAGC AGCACCAGAA TMTTACCAGC CAGTCTGTG TNGTCAACAG GGNNTTCCAA GGGCTAATAG GAGTNCAGCA  
 GCCCACTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TCCATAATAC TCCTGCTGTG TTCTGAATAT TTGTACTTCA CATGGGATTA CTGAACACTA CTACGAGATT  
 CTGAATGTTT GINGCTACA TAGGATTCCA AAATGCCCT GCTGTGTTCT GTTTGTCCCT CACATAGGGT CACTGCTGCT  
 GGGTTCTCAG TGTTTCTCAC TCACATAGAA TTCCAGNACA CTGCGAAGAA TTTCTGAATG GTTTTCTGTA ACATAGTATT  
 CCAGCACACT CTCGCTGTG TTGAATGTT TGTCCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCGTGAN ATCGTGACA TCCAGNGGG CCANTNCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC  
 ATCAGTGATG AGCATGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTGTCAG CTNGAGAGAN TCAATGTTTA  
 CTACAATGAA GCCACTGGTA ACAAATATGT TCCTCGGGCC ATCCTCGTGG ATCTGGAGCC AGGCACGATG GATTNGTTA  
 GGTCTNGACC ATTCGG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACAAATCAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACTTTAAC  
 AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TTTTNCIGAA AAGCATGGT CTTCTGTACA GAAAAATAAA  
 AAAGTGAGCT GCCACTATA GTGAATTAAG AGCTGTGGG TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTCATA  
 TAATAAAAAC AGTATGTAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTTINAGTCT CGGCCTCACA ATTCAGCGAC TGCAGCTCG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA  
 GATGCAGAAG CCATTGGAAG ACCCTTGGTT TGCGCGCGG ACGGGGAGA TGAGCGGGAC AGTGTTCACG GATTCGGCA  
 TCCACGTAT TGTCCGACG GAGTAGGATT NGGGGCCAG GCCTGGCCTC GGGGTTCCTC CGCTGCCTGC TGGCCAGTGG  
 CNGAACCCCC CANTNCTGC CACTNTACA CAGTATTTAT TGTTACCAAA ATGGCT

SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCTCA AATTATGGGT AGTCCAAAAG CCAAAGGCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAACAGAA  
 ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT  
 TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTAA TAAATACAAT TTAGCAAGTA CAAGAATGCT  
 GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEQ ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGTTTGGT GATTCTNTTC TGTGTCTGCT GATCTATTGG CGTGAGAAGC TGAAAGTGAC CAGCCAACAG CCATAACTTT  
 ATGTTTAGTG AGACTCATAA TGGGTCTCCT GCTGGAAGAT CTCCCCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGTTT  
 GAAGTTGTAA GCATGGGAAA CACAAATTC CCAAATAGGT CCAGATAGTG ATAGAGAATA AGACACTTAC TTGCCTACTT  
 CCATTCTCA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTTGAGGTAT ACATTGCAG  
 GTTGAAGGAC AGTGCCTCAT CCTTGACGGG GTGCCCTTTN CCAGTTGGCA CCACAGCT

SEQ ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTTTTCGG GGGAGGTGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAATG CTGTTGTATA GGGATGCAAT  
 ATTTTCGGTG TAAGGAAGAG GTTTTAATTC ATAAATAGA AAACAGGTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG  
 GGTGGCTTT TGAAGGAGAA GTTATACCC AGGTTCAAGC TGAAGGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTG  
 GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG  
 AGCTTCGGCA CATAANCTAA AGAGTTTAAT TTT

SEQ ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTTT GTAGCTGGAC TTCCTTACA ATGTAACAGA ACATTGAATA TTAGATTCTG AGCATATTCA  
 TGCAAACITC CACTTTGGTG AAAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCCT  
 TTGGACTATG CTCTCAAGAT AGAAACTTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA  
 CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCTTGG GTNATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG  
 CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGTCAGTAA TTGCTGCACT AGAGCTAAAT AAAAGACATA AATATCTAAG GCACCTACTG GAATAAACAT CTTATTTCCG  
 CTAAGAGGTT GGCTAGGGAA GCTCTGCTTC AGAGTATGGG TTGAGTATAA GCCTGATCCA CATGTCTTTT GCTCTGGGAC  
 CAGGAGTTGT GCAGCCCATC CTTTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTTA AAGCTTCACT TCTGCTCACA  
 TCATATCTAT TGCNCAACA TTCCATTGGG CCAAAGCAAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT  
 ATTCTTTTCT CTACTCTTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATGTCCAT ACTTGATTAT TAGTTTCTAA AGAAAGTATT CTTAATTCCA AGCCTAATAG CTCTTATGTC ATTAGTTTCT  
 AGTGCAGAGA AATGTACTTG ATGAATTTT GTTGACTTTT TTTTGTGTA GCCAATATGA AGGTTGCCAG TCCCTGCCAA  
 AATCAGCACT AAACTATTT TNCATGAGTA ATAACAATA TATTCTTTT TAAATAGCAC CTTTAAACCA AAAATCTTAA  
 GCCTATATAA ACATTCACTC AACANTACAC TCAAAA

SEQ ID NO:1598: (Length of Sequence = 355 Nucleotides)

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TGTATTGCTA ACTGTCTTTG TAACTAATTT ATGTATACNC TAAATGGTAT AGCATGTGAT TTTATTATAG TTGATTAACT  
 TTGTAATINC TGTAACIGCA TOGATATCCC AGTCTACCTG GAAAATTAAG TCTATTAAAC ATAGTTGCTG TGGGAGACAG  
 TACTATTGCC AACTGAAGCC TGAATCCTTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG  
 ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTIGTTTGA AGGAACTGAG GTTGGTAAAC  
 ATCACAAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEQ ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GTNCTGCNCT CAAGGACCTC AAGCGGCANT  
 GCATTGAGG CCGAAACGGG CAGATAAGCT GCAGGAGCGA CTNCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC  
 TINAGGAGCT GGTTCCTCA GAGATGAACT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC  
 TACCGGGAGA TCCTTCGGGA AAAGGAGGAG CTCGGGCTTG TTCCAGCCAG GTCCTTATCC AGCAGNCCIN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGTTCACAGA ACTCCAATTC TTTATTAAATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA  
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGACTTCA AAACGCGAT AGGTACTTAT GGTTGGGTATC  
 TGGTGATTCT TAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CANITTCACA GATGGAGTGT TTTGTTGTTG  
 GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGGTGAAC CCGTCTCTA CTAAAAATCC AAAAAAAAAA AAAAAAATT AGCCGGGGGT  
 GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT  
 GAGCCGAGAT CGCGCCACTG CACTCCAGCC TCGGCGACAA AGCAAGACTC TGCTCAAAA AAAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAGTCCTT TCTAATGAAG AGGGGAGATG TTATCGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCTG  
 GTTCCTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCAGGC AAGAAATCTT CCGAAAGGTC  
 AAGCCTCTC CAGACAGATT TGAAGCTTAA GGAAGTGGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG  
 GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAGACAG NAAAGCCGA

SEQ ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAATTT TAAGTGTAA GGAAGCCAT TAGAGGGTIT TAAACAAGGA AAGATGTGAT  
 GTGACTTATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT TNNITGGATC TCAGTACTGG GATACTGAGA  
 TCCCAGGGG AAAATATCAC TAAGGTTGGA ATTGCTTTTC TGCAATTAA AAGCAATTCN CTTTTTCCTT GAAACCTCCA  
 TGTGATGTTA ATTAGGGTAA ATG

SEQ ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTATT TTTGTGTTCT GAACATAAGT NCTTGTAC ATAAAATGTG CTATGAATGT TGAGTTTAA  
 ATACTGAGC GTGACTCAC GCCTGTAATC CCAGCACTTC GGGAGGCCAA GGCGGGCGGT TCACCTGAGG TCAGGAGTTC  
 GAAACCACTC TGGCAAACAT GGTGAAACC CCGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGTCGTGG CGTATGCTGG  
 TAATCCTAGG GTTCTGTCA

SEQ ID NO:1605: (Length of Sequence = 290 Nucleotides)

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GACAGACATT CAAACCATGG CAGGTGGCAA GAAGTATCAA ACTACTAGAT CCTTGGGATT GTNCTTTGTA CTGGGGTGTA  
 TTTTINCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CTNACCCATT TGGAAATGCA CAGAGATTCA  
 GGAGTGTCA CATAGAAACA GAAGATCATT GGCTTTTGTG CATTCCCAAC GCCAGNAATC TGTTTTCCIT GACTCTTTTT  
 GATCTGTGTT TCTGAATGTA TTGATATACT GCGCCTACTG GGTGTGCAGG

SEQ ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGAAGCTGA GTGCATATGG TATATTINAT TCATTTTGT AAAGCGTTCT GTTTGTGTT  
 TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTTG AAAAGTGGAG TTGATATTAA  
 AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCAATGT GTGAAAAGAA TTGGCTAGAT  
 AGGGGATTTT CCTGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGTTC CTTGTCTCTC CTCTCCTTG AGCCTCCCTC TTCCCTGAGA CACAATAATA TTAAAATTG  
 GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATTGTCTA GTGCGAGGA AGAGGCATAC ATCTCTCACT TTAAATCAAA  
 AGCTAGAAAT GATTAAAGCT AGTGAGGAAG GCATGTCAAA AGCCGAGACA GACCAAAAGC TAGGCCTTTT GTGCCAGTTA  
 GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC  
 AAACAGCCTT ACTACTINGGA TATGGGGAAA AGTTTTTCAGC TTGGG

SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCTCTTCT TCACCTACCA TTACTAACTC TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC  
 CACTATTTTA AAATTTATAT TCAGATTGT TTGGTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA  
 GAAAACAATG GTGAGTCCCG GCGCTCTTCG AATTCACCTG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCGTCTAT  
 CTGATTCCAA AGCTGTCTT TGCCATCTCA TCCCTTGNC TGCCCCCAA CCCT

SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCTTAATAA GAAGATGAGG AAATAAAATC AGTTCAAAG GGAGGAATAT GCATTCCCAG AATTAAAGGA  
 CCCCCGGTCC AGTTTGAGGA GGAATCTTGG CCAGATACAA GCGCCTTGTA TAATNCTCAA GAGGGAGGAG ACCTTATTIN  
 CTCTTNGAG GTGCTAGTA TGAAANCTGC TTATTTTGAA ATGTGATCT AGCCATTATC AGGNGCAACT GCAGATAAT  
 CCCATTTACA GAGGAATGCT GCTAACAGGT GTGGGNGGA GCAGCGACAN CGNAAAATTC TGCTGTATA GTTCACGTTT  
 ATGTTGGTTT TCTTTGAAAA TCAAGGGGTA GAAAATTTCA TGCTCTAGA GGAGAGAGAG GAAACACATG AGG

SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGCTGTATT TATTAAATG CCTTACTAC TTTTAGATGG CCATACGTTT TCAAAAGCAA AGACCTAGTA AGCCATTTGT  
 GTTCATTTGC TAAGCTATCT TAGGTACAGG TCCAGATTAT AAATGTTACC TGCTAATCAG AGAGCAAAT TTTAAATTAA  
 TCACTTGTA ATCCACATTA AAAGAAAAAG AAACCTAGAA AAACACATAA ATTTCTTTTG TGATCCCACT ATTCAGGAAA  
 ATCCATTGAA AAAGCAGATG ACTTATCCGT GTTAAATTTT TAAAGNCCCT ATTTAAACTG TCATGTAAAT TCTNATTTAT  
 CTAATTTTTT AAAACACATA TAGNTTTTTA CTCTCCAGTT CCATAANTGN CTCANITCTG GTGANGGTCA TTACACAGN  
 CATTACGNGG GCATATCGGN NTAAAANGGC CNTGCGGTCC TGNATCNGAG GNGGGGTAA GGTC

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TTCTACAATG TAAACCCCT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA  
 NTGTTTTNT TTGTCATGCC CAATTATTC ANCAAGTTTT TATTAATAAC TTGCTACATG GTAGGCACAG CTGTAGGTGT

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TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCACGGAGT TCTTATTTTC AAAGTGAAG GTAGAAAATA  
 AATAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTCA AAATGTCTGT GNGTGGGATA  
 AATAGATCAG CAACACACCA GGCCATGCAA TTINGCAGCA AATCACTTCT GCAGTCTAGC TGCTGTTTTT CCTACTCTGG  
 AATCATACTC CCCCCTCGG TCATCTNIGC CAGTTTCTCT GNGCTTCACC CTACCCCTCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATGA ACAACCTAA AGAGAAATGT TCTTACGTT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT  
 GGCAAAGCTT CCAACATGCT CGTGTTTTCG CAAGCTATTT ACTGTTTTCC CAACCCAGT CTCCTAAAAT TTGACAAAGT  
 AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTCTA AAGAAATAAG GCTTTCTACT TTGAGAACT CAACAAGCAA  
 TACTTCCTTC CTACAACATA CCCTGCAAAT CTTAACACTA AATTACTTTG TGTCTATGNC CCAAATCTCT AATGACACAC  
 AGTAGCAAAG NGTACCAAGT TCAGAATTT AATAACAGNG GTNATTAGGG CAGGTGTTAG GGCCTAGNT AAGNGCTTTG  
 CATCAGTTCT GGATCAGNCT TTAAATAAC CCCTTAAGNG GGGNTNAGNC CCTTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGTGGAGAT TTGTTGTTGG CTAGGGCAGT CCAGAGGAGA GATATGTGGC AGGACAAGTC TCTACCCCTAT ACAAGTNCCT  
 CCGGCAAGCC CTCAGCATAT GACATAGGCC CAGAGAAGGA TGCAAAGAAT TCTGGTCATA AATTGTTTTT AAATATCAAA  
 TAAATCATAT GTGCACATGC ACAACATGC CTTCACTACT GAGTAAACC AGACTCACCT TCAATATAT CAACAGTTTT  
 NTAAGCGCC GTTAAAAATC AGGCATCGGA CCTCTGNTN CGAGAGCTGG TTINATGGGG AAGTTAGATC AACCCGTCAT  
 CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAATAT ATTTTTAATT TGTATTTC AITGAAATTT GTAAGNCCA TTTTATAATG TATTGCTTGC  
 AAAATAAGTC ATGGAAGCCC TGAAAAATTA GTCAATTTC TAATCAAAGA AACATATATT AAAGACCTAC TATGCATGAG  
 GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGNTC CCGTTTACAA GNTATTTACA ATGCAAAGGG  
 GGATACAAGA CATATAAAG GCTATGGAAC TGCCCTTCCG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGTGGTGGT GCGTGCTGT AAATCCCAGC TACTACGGAG TCTGAGGCAG GAAAATCCCT TGAACCAGGG AGTCGGAGGT  
 TGCAGTGAGC CGAGAGCAGC CCACTNCACT CCCGCTAGC GACAGANTGA GACTCCGTCT CAAAACAAA CAAAACAAA  
 CAAAACCA AAAACACTGG GAGTCCAGT TTGTAGGAAA TCATTAAGAT TTTATTATTT GAGCTCCAGA ACGAGTGAGG  
 ATGACCTGAT AATTTTGGTT TGGCTCAGGT TGTAAATGTT TCTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAACT  
 GTGTGGTGGG TAAGAATCAC CTGGGACTT TGACCAAGTN ACATGTCTAC AACACCCGGC CCCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCAGC CTCCTGGAG CTATCCCTTT CTATCCCTT CCATCCAGCC CCTGGCCACC ACCATTATAT CTATTCTGGA  
 ATTCCACAG GAAAAGCAG CACTTTATAA ATCAGCGAGG GATTACGGC GAAATGAGAC TGTTCGTGAG TNATGGCGTN  
 CCGGGTGTCT TGCCGGTGT GCGCGCGNC GGGAGAGCCC GGGGCAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCCGGA  
 AGATTGNTG GTNCCGTTCC TGACCCGNC TAAGTCCCT GTCTGCAGC TGGATAGCGG CANCTANTIN TTCTCCACTA  
 GTGCAATCTG CCGATATTTT TTTTTTGTTA TCT

SEQ ID NO:1617: (Length of Sequence = 227 Nucleotides)

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TTTCTTCCAT GCAACANICT GNAGACTTAA GTGGCTTTCT NCTGTACTNC CATAGAACCC ACCCAGTACA TACCTCCAGT  
 GNGGCACTGA TTTTATGCTA TACATATGAC TGTGTGTTCA TCTCCTCCAC CAGACTGTGA GTCCCAITGG AGTAGGAAGT  
 AAATTTTNTT CAACACTCTG TCTTCATCAC CTCGTGTAGT ATCTTGTACA GAGTAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGGTTTT TAATGCATGA NGTATACTTG TNATCCTGGA GGTGGGAAAA GATTTCAGTAA AGATAAAGTT TGGCAAAAAT  
 GATTCTCTCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT  
 CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACTTTG GACTTGGCCA  
 TGCAACTTGC TTGGCCCAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC  
 TTCAACTCTC CACCATGAGG ACAACATTC CTTCTTCTT GG

SEQ ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCTCAT CCCAGGTTCA AGTATCTTC CTGCCTCANC CTCCTGAGTA GCTGGGATTA CTGGCGCACC ACCACACCCG  
 GCTAATTTTG TATTTTTAGT AGAGACAGGG TTTCGCCATG TTGGCCAGGC TGGTCTTGAA CTCCTGACCT CAGGTGATCC  
 ACCCACCTCA GCCTTCCAAA GTGCTGGGAT TCAGGCATG AGCTACTGIN TCGGCCAAA TCTTTCTTAA GTGTGTCTG  
 GCCTTTGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGT TTTACTCTTC AAGTGATGAT GGCATCCGAT AANCTTTTAG  
 AGGGAGGTTT TTAAAATGCA ACGT

SEQ ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCCAGCCGAA GCTCCTCAGG CTCCCACCT CTACAAGTC CTCTGTCTCC AGCCACACTC ACCAGGCCCG AGTCCCACC  
 TAGCACCTTC CTTGGGAATN ATCTCCCCCT GGTGGCTCT TTTACTTAT TCAGCCTCAA ATGTNATCTC CACTGANAGG  
 CCTTTCCTGA CTTGCTGAGC TTGATTCCT CCCTCCCA GTNACATTAC TCCGTGTAT GGTACCCATC CTTGTCTCT  
 TAGCTTGTIT TTGTCTGTAT TGGCTCTTCC ACTAGACTGT AAGCTGCATG AGGGCAGGG ATGTCTGTIT AATNCCAGT  
 GCTCAGGATA GTGTATGGCT CGTGATAGAT GCTAGNACA TTTTAAATG GGGACGGAT

SEQ ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGGG CTCGGGGAGG CAGAGAATCT CTGGGAGTC TTGGGTGGCG CTGGTGCAAT CTGTTCTCTC TTGATCTCAA  
 AGGACAATGT GGATTTNGG ACCAAAGGTC AGGGACACAT CCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGACTGGAA  
 GGGAGGAGCA GCAAGAAGCA GCCTGTTTTC ACTCAGCTTA ATTCTCCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT  
 GCTGCAGGAC CTCCTCTAC TACTTCTGT CCTAAAATA GGG

SEQ ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTTTAA AGCAGATAAT ATTTCAAATA TTTTCTTTGA AATAGACCAT TTGTCCTGCC TTGAAGTATG TTAGTACATT  
 TTAAGAAAGT CAGTGGGTTA AGGAGTCAGT GCTGTTAGTA TTCATGCTTA AACACTTCC CTCTACCTA CCTAATAAA  
 TGAGGGGCTC AAGAGAAATA TTTCTAATTC TCTAGCGACA TGGCTAATTT TTTTITTTTAA TGTATTTTGT TATTTTGT  
 ACAGATGGAG TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCTGAGCT CAAGTGATCT GCCTACCTCA GGCTCCTGAG  
 TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAGACAG AGTCTCGCTC TTTCGCCAG GCTGGACTGC AGTGGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCG  
 GTTCAGCCA TTCTCCTGCC TCAGCTCCC GAGTAGCTGG GACTACAGGC GCCCGCCACC ACGCCTGGNT AATTTTGT  
 ATTTTITAGTA GAGACGGGT TTNACCATGT TAGCCAGGAT GGTCTCGATC TCCTGACCTC GTTGATCCGC CTGCCTCGN



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CTCCCAAAGN GTTGGGATTA CAGNGTGAG CANCCGTGCC CAGCCGTINAA GTTAAGATAT TTTAAAAANA TCTCTGCAAG  
TTGAGGAAGT NTTTCAGGAC TCTTCTCTGC TTAGTCTCAC T

SEQ ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTTTGTGAGC TTTTGTGACCT GCGGGATCCG AGCCAGATTG ACAACAATGA GCCCTACATG AAGATCCCTT GCAATGACTC  
TAAATCACC AGTGCTGTTT GGGGACCCCT GGGGGAGTGC ATCATCGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA  
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG  
ACCATGTTTN TGACCGCGTC CAAGGACAAC ACAGCCAAGC TTTTGTGACTC CACAACCTTT GAACATCAGA AGACTTTCCG  
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTCTGTG AGACAAAGAA ATTATAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTCAC GTTCCATGAA  
TCAGTACTTC ATTTCTTTTT TATGGATGAA TTAATATTC ACTGTACAAA TATACCACAT CTGTGTTTTT CATTCGTCTA  
GGTTAAAAA TTTTATTTTT TATTTTATT TTTTGTAGA GACGGGATCT CACTGTGTG CCCAGGCTGG TCTTGACCTC  
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAACTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA  
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCTCAAAA CAAGTTGATG  
GTGATTATGT TGTGTCTGAA TGGAGTGAAT TTATAGAATT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG  
TTGGAGAAGG CTGAAGTGAT TNCAGGACGC ATGCTTAAGT TTTCTGTTTT TTATGTAAAT CAGCACAAG NATATTTTGA  
CTATGTTCCG TAAGNTTCAA AAATATATAG TGAITTTGTT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTNTCCCTC TGACCTGGGC  
GCTAGAAGGG CAAAGAACCC GAGCCTGCCA GCTTGGCCTC CTCCACAGC CTCCCTCGGA GGCATGCCAT GCCAAGCACT  
CTTCTGTCT CTGTTCATGA ATAAAAGAGA TGGATGGGCT TATCTTATA GAGAAGTGAA TTTCACTTAC TCCCCTGGCC  
CGAAACTAG ACCAAATGAG GAACTGTTTT AGCTCATCAA ACTGTATAT TTATTTTCAA CAATGAAAAC AACACAACAA  
AGTGGAGTCA ATCCACTAAT TTTTAAAT CTAACACAAT TGTTTGACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCTCCACT CTTTATATCA TTTTCTCCAT CTTTCATTTC CCATCTGTAC CTCCAAAAT TTGCTATGAA  
TCTAATTCAT CTTTGTCTC TCTCTCAT GGGTGCCCTT GCTCTGCCA GTCTTCTTC TCCTGCCCCA CCCAACTTC  
ATGAATTAGT CTTTCTCCC AGGAGCTCTG ATTTCTAGAC TGCTTGAAA ATGCTGTATT CATTTTGCTA ACTTAGTATT  
TGGGTACCT GCTCTTGGC TGTCTTTTT CTGGAGCCCT TCTCAGTCAA GTCTGCCGA TGTCTTCTT TACCTACCCC  
TCAGTTTTCC TTAACACGNG NACACAAC TCAGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT  
TGTGTGCTA AGAATGNGTA GGTAAATA GGGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGGAGGT GGGGGTGGCC GGCAGACAGG GTGGGGTCCG CATCGGTAC CAGTGACAGC AGCCTCTCCT  
CTCCACGGT GGTGCTTGT TGGGGCTGTG GCCAAAGTGT TTGCCCGGCC CCTGACTGTA TCCTTCOGGA GCTGCCGAGG  
ACTGCAGAGA GGGCCTGGCT TGTCCCTCT AGGAGCAGCT GGGNNGTGT CTTGCCTGCA TCCCCCTTCA ATGGTTGAAA

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ATAATGATTC CACTTGTTCAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACCTCTG TTCCCGAAGT GGGAAACCTN  
GGGAGGGTCC TCAAAACCCC T

SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TCCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCCTCAAC ACGGGCACCG  
CCATCCAGTG CGTGCGCTTC AAGGTCAGTG CAAGGCTGCA GGGTGCTCC TGGGACACCC AGAACGGCCC GCAGGAGCGC  
CTGGCTGGGG AGGTGGCCAG GAGCCCCCTG AAGGAGTTCG ACAAGGAGAA AGCCTGGAGA GCCGTCTGTTG TGCAAATGGC  
CCAGTGACCC CCAGACGCGG AAACCGGGTG GCAGCGCCAG CTTGGGCCCA GGCATGGAAA CGGACAACCC CTAATCGCTT  
TAGCTACTGC TTCTAACAAC TCTTTTCCCT TGTGTTAAGG GAAACCAGGT TCAAGGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGGATTTA TTTGGACAGG GCTGTGCTGA GAGTCCCACC CTCACCCAC AATGGGGGGG GGCCTGGCA TCGAACACCA  
AGCTGAGTGA GAAGGCTCC TCCAGGCTC GCAGGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCCGACTC  
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC  
TTCCAACCACT ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTTGAGGTCA TTTTAAAGG  
GATTCTCCG GNAAAGGAG CNCCGCATCG GCGCNCITAA NCCGGCGTTT CGGTTTCATCC CGA

SEQ ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCCA CTGCTAAGC CAGTCTCACT CTAGGACACC TGCTTAGCGA  
CCAGCAAACC TGAATGAAA GGGCAAGTTC CTCAGTGCCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC  
TGACTACCTG CTTAGTGATT TTTGCTTCTG TGCTCCAGA CCCAAGAAAA CCACGTCTCT TTTCTTCTT CATCGACTCA  
TCCCTTCTT ACCCTATATT GTCTCCTCA CTCTCGCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCTGG  
GACATACCTA TTTCCGCAAC TGAACCTCC CAACCCCTAG GAAACAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC  
AAAGAGGCAT GNACCATAAT TACT

SEQ ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTTTTCTAC AGCATCTTT TATTGTCTT ACCATTACTT TAATGCATTT TAAATTTAT CTACATTAAT TGGGAACAT  
TTGCATTTT TTCATCTCT CTCTCTTTN CTTTNCITT TTTTGGATTT GTCTTGGCCA GAGAGGTCT CCAACACCCG  
GGTGGACTTG GAATTTTITA TCAGCTGCAA TCTGAAGACT TGCTTTTACT GTGGAATAGG TGACATTCCT TTAGGACCTC  
AGAAGTCAA GTAGTTTAAAT GCCAAGTCT TCAGAGCCT CACTCTCTT TATTTTITAA ATTAGAATIG TGATTTATIG  
AAGNCTTACC ATGGGGTTCA TATAATTINT NAATNGANCA GCTTTATTGA GGTATAATTC AATACCCCTT TAAAGNATGT  
AACCCGTGGG TTTAGAC

SEQ ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGTGCAATG CATCACCTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TTTATCCCAA TTCAATGACA  
ACCAGAACTT ATTTTTTTTG AGATGGGGTC TCGTCTCTG GCCCAGGCTG GAGTGCACTG GGGCATTCT GGTCTATCGC  
AGCCTCCAAC TCTAGTCTC AAGCAACCT CTTAGTCTAG TGCTCTGAGT AGCTGGAAT ACAGGCATGC ACCACCACAC  
TTGGCTCATT TTTAAAAAAT TTCTGTAGA GACAGGATCT TGCTACATTG CCCAGGCTTG AGGTGCCGTG GTGCATTAC  
AGCTCACCGC AGCTCAAAT CTTTGGTCTC AAGCGATCCT CCGNCTCAG CTTCTGGGT GGTGGGCT CAGGCATACA  
CCACCATGTC TTGGTCAATT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)

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CAAAACTCAC TTGACCCCA TTAAGAGGCA AGCCTGGCAC ATCTATCCCT GGGCCTTTAG AAAGCCATTT GCCTCAAATG  
 GCTATAGGGT TGTGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGTNGGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA  
 GGTGTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGAGGATCG  
 CTGAGACCA AGAGTTTGAG CCTGCGGTA GCTGTTAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT  
 TMTCTACAAG AAATTTTTTA AAAATTGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCTTCCG TGTGCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA  
 ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTGG GGATTTCCCA CCATCCTGAA TAGTATCACT GCAGTTGACA  
 CAACTTCCAG GGAAGTCAG AGTAAGTGCT TAATATTATC CACGAGAAAG CAAAACATAA TATTAGTGTG CACATTTCTG  
 AATGAGAAAC TAATTGCTTC ATTGATTTC ACAAATGTAGT GGNAGNAAAC TATTTTCAGT CTCTACAATG CCTAAATGCA  
 TTCTATTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGCGCCCGAC GAGGCTCAGA CCTCTTNTAC GNOGACTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT  
 CGGGGACGAT GAGGATNACT CTGGCACGGA GGAGTCTTNA CACCACCAGA ATAAACTTGC CGAGTTTANC TCACTAGGGC  
 CGGACCCGTG GCTCCTTAGA CGACAGACTA CCTCACGGAG GTTTT

SEQ ID NO:1638: (Length of Sequence = 253 Nucleotides)

CATCAGGCT CACCGTCTG CTCTCTGCAC CAGCCTTCC AGAGCATNCC AGTNTCATG GCTTCATCTG TTAAGTGTG  
 ATCACTTCAG TCCTGATTTT TAGACCTAAA TGGTTTCCCT AACGCCATTC TAACTGCCTG TGACTCATTT TCACTTACAG  
 TGTTTATGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CTCTGTCCA TAAATCTCCC CAGTCTAACT TTTGTTCATT  
 CAACATGRCT CGT

SEQ ID NO:1639: (Length of Sequence = 360 Nucleotides)

TGTGGCCAAG GACCCATCG TCAATGTATG GACTCTGTG AATGGTGAGA GGCTGGGCAC CTACATGGGC CATACCGGAG  
 CTGTGTGGTG TGTGGAGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTNG TCTCTGGGAC  
 TGTGAACAG GAAAGCAGCT GGCCCTTCTC AAGACCAATT CGGCTGTCCG GACCTGCGGT TTNACTTTG GGGGCAACAT  
 CATCATGTTT TCCACGGACA AGCAGATGGG CTACCACTGC TTTTGTGAGC TTTTFTTGAC CTGCGGGATC CGAGCCAGAT  
 TGACAACAAA TGAGCCCTTA CATGAAGATC CCTTGCAATG

SEQ ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTGGGACGCC CTCTGCCCTG TCTGAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCC TGGATGGGCC TGAGCATAGC  
 AGACCACGTG GTCACATGTG CATGTGTGGA CATGTGTGCA TGTGTGGATA TGTATGCTCC TGAGTGTATC TGCATGTCTT  
 NCTGACAC ACAGTGCTCC CCTCCGATG TGCCAGCTG TGGTGGACTT CCTCTTCTGA CCCCTTCTT GCCNCCGGNC  
 TGTTTTATCA GTGAAGGAC TTAACATAAGC AGATCTCCAG GTTCACCTTN TGGAACTCAG CTCAAGGTNA GCACAGCAGG  
 T

SEQ ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGGTGCCA CTGTCTGAT AGTTTTTCCC ATCTTAGTAG CGNACCCAT AATTAATGCC TACTCACATC AAGTTAGCAC  
 CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCCTC TTGNCCTG AGGTGGGGG CTTCATCAG AATGCAAATC

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TRCOGAGGCG TGAAGCACAA TTTAKTTCAA CTGCCATKTK TTCCTTCACA GTAAGRCCTT CTGGRGGAAG GAAGCAGTGT  
GTTTGAGTTA TACCTTAGGC CAAGCT

SEQ ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCCTCAGGAC CCOGTCACA GGCACCCGGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC  
AATGTGGGCC TGAGTCTCCT NCCCACTCAC GTCACTNCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG  
GGTTCCTAAC CTCAATTATT CATCTGCTC TCAGGCACCT CCTGACGAGA CCTGGGCCA GGAGAGCTCG GCTCGGGGAC  
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATTTGTA GTTAAACTT TTCATCTAAT ATTAGATTGC ATGCAGGATT TTATATCTAA TTAATCTGGC AGATGGCCTT  
TAGAAAGTTC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTACTAT TGAGACCAAT GCTTTCTTAA CTAAAAGGTT  
TTGTTTAAAA TCGTTAGTTT AGGAAATCTG ATAAAGATTT TTGAATATCA GAGCGTTTAA AAGAGATTCT TACTTTACAT  
CTGGCATATT TCTTGTTTA CATATTATAA TTCCATTGGA ACATGGCTGT CTGTAAACT ATGTATATGA TCCGGAAGAG  
ACTCAAATTA AATTAAGGTT TAACAGCCAT CAAGTTCAT

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCACTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT  
CAAGAAAAA AAAAGAATTA AAAGATGTGA ACAAAGCAA GAAAGTGTG TATGAACGAA ACGGAAATAT CAATGAAGAG  
AAATAAAAT TATAAAATC AGGAAATGAG ANGTACANTA NCAGNAAAT CACTGGAGAG ATTCAAAGC ATATCTGAGC  
AGGTAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGAAA AGTACTGAGT CTG

SEQ ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGGAATATT AATTCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCATGA TGCATCCAAC  
CTTCTTTTCT CTATATCAGA AACTAAAGA ATAAATGTAA CATCACATTC TTTTCTCCTT TGGGACAAAC AACTATGTAC  
AATTGAATAA AAATGAAAT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT  
TCAACATTTT TTATACCTGT GCAATAAAT TTTAAATGAT GTCTGAAATG CTTTGAAATC TTCAGAAACA GGTTTATAAA  
TGGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGTNCCT CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA  
AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC  
ATTTGTTTCA AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCAAGAGGT GGGGACCAA ACCATGCAIT CTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
CTNAGGAGTA GCTGAGAGGA AAATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA  
AGGGTT

SEQ ID NO:1648: (Length of Sequence = 338 Nucleotides)

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TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT  
 GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA  
 CTGAGGAGTA GCTGAGAGGA AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAANTGTGA  
 AGGGTGGGGT TTTATGINTG GGAAAGGGAC CCGAAGCCCA GGCTGAAGAG TTTTAACTTT GGGCCCAGAA ACTCAACCAT  
 CAATGGAAC AGGGCAGT

SEQ ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTTAG GATTGAGACC CGGAAGGCTT CRAAGGCTGT CGCAAGGAGG AAGAAGTGA AGAAGTTGG GAACTCAGAG  
 TTTGACCCCC COGGACCCAA TGTGGCCACC ACCACTGTCA GTGACGATGT CTCTATGACG TTCATCACCA GCAAGAGGA  
 CCTGAATGC CAGGAGGAGG AGGACCCTAT GAACAACTC AAGGGCCAGA AGATCGTGTG CTGCCGCATC TNCAGGGCG  
 ACCACTTGA CCACCOENIG CCCCTACAAG GATAC

SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT  
 SCITTAAGAA AGGAGCTGCC ATCATATTAT ACCCTGACCC AGCTGGATAC GAACAAATC AGCCTTGGCA ATGCAAGTCT  
 TACATCTATT TTATATAGAT TGTATAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTTG TGTGTGTCG  
 GTAATTAATG AAAGAGAGGC TATTGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTGCTTTT TAATTGTATT TCTTAACACT AGAATTTTCT ATTCAAGTT TTGTACGTC GCCTTGGTC TCCTTAGTAC  
 ATTTTATAGT CGCTGTAGT TGATTCCATT TTTCTTGAAA TTGAATTC TCATGACCTA ATTTCTTCT TGAATCTAC  
 ATCTACTTT CTCAATGGAC GCAGTGACGC AATGAAGCAT CCAGCAAAGC TTTGTGTTT GATTGTTTAT GACGTCACCC  
 TGTGTTGTT GAAGTTGTCT CACAACACT TCTCTTCTG CTCTCTCTT TTCATATGA CATGTTTTT CTMTTCAAT  
 GGATTAACIT TATTGATCAT CCTCTGTC TCTAGCAA AGACGGGTGC TT

SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TTCTGAGTA TGCTGCACCT GATTATTAGC ATGTTAAATA GTCAAAGGA CTGGAATAAA CATCAGGAAG ATTTCAATAA  
 GTGGTGTAG TAGAAAAAA AGGTTAAACA ATGAGCTGCA TGTGATAAG TATAAGACAC TGATCCAAGT GGTGGCTTCT  
 GAACCATGAT ATTACTTAAN CTAGAGTGT AAGGTCAGCT TAAGTCAAAA TAAAACAAAG CTCCAAACC CTCATTTTAA  
 ACACAGTAGA TAATAGATGA NCTTGTATC TGGGAGATA GTACAAGCCA AANGTTACAG CTGTGTTAAA ACCT

SEQ ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAACT ATAGGACTTT GGCTTAACA TTCTGAGCT  
 CCTGAATCAA TACTTTAACT ACCTTCTATG AGACTTCTTG TCACATGAGA AAAATTAAAG CCCAAATTAA ACCCTGCTT  
 TTACTGTAA CTCTCAATTG AGCATAAATC CTAAATGNTT TAATCAATTC TACTCTACTC TGGCATGATT TTNAAGGCAT  
 TAACCATAAT TTCTTCCAA TCTAAAAGG GAACIANIAC TTAAGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA  
 GGC

SEQ ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTTGGCCT GCAGGAACAT GGCAAGGGCG AGTGAAGCAG TGTACGSCAT TTTAGAAGAA TGGCATAAAG CCAAGGTAGA  
 AGCAATGACC CTGGACCTCG CTCTGCTCCG TAGCGTGACG CATTTTGCTG AAGCATTCAA GGCCAAGAA GTGCTCTTC  
 ATGTGCTTGT GTGCAACGCA GCAACTTTTG CTCTACCTCG GAGTCTCACC AAAGATGCC TGGAGACCAC CTTTCAAGTG

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AATCATCTGG GGCACITCTA CCTGTCCAG CTCCTCCAG GGATGTTTTG GTGCCGCTCA GCTCCTGCCC GTGTCATTGT  
GGGTCTCTC AGAGTCCCCA TCGATTTACA GG

SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAATT GTGAGACTGT TTGTATATAT TTTTGTGTTA TATGTTTTTG TTGTGTTAT GTGTATATNT TTATTTATAA  
AATGATAGAT CTGTGGGTAG GTTCTGAGAA ATGAATAGCT TGTATTTCTT TTTTATGAA AGAAGAACAA AATGAAGTTC  
AAGTGGAAAG TATCTCCAGA AAGTTTAAACA TTTTCTTATT AACCAACTCA TTGATTGGCA TGTGAAACTT GAGATATTTT  
ATATAGCACT TTTTAAATGA GGATCTAGCT TCACINTATC ATACAACCAC ATTAAATA GCCAGGTCCA TGTTCATTAT  
AGGGG

SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNTTAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT  
GGAAGGTTTA CATGCAGGTG GTTTATTAGA GAGTGATGTT GGAAGAACA CCTGTAAGN AAGAAGGGAG CCTGGGAAGA  
GCAGNGNAG AAGGTGAAT CTGATTCAT TGCAACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG  
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCCTGTT TACTC

SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACTTGACTT TGCTTTTTTC CCCCCAAGTA GAACTAATGC TAGCTTCCAG CTGAAAGTA AAATCCAGT GTGGAGTGAA  
TTTTGTGCTT AATTATAAAC CTGTAACCAA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCCTGTAAAA  
CCCCCTTAA AAGCATATTG CATTTAGTAC AGAGCTCTTT TTTGAAATGN AGGCTGGAGA TGTGCATTTT TCACGGTGT  
AACTGGTGT ATCTTATTAG CAAGGAGATT GGGGTTTTG AGTGTGCG TGGGTGGGT TCAAATTTGC CAGGGGAACC  
AGTGGGCAGG CTGCTAGCAA GGCACTGAGG AAGCTCTGG CAGCCAAATG GGTGCAATTT CAGGG

SEQ ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTTCT CCAACACTG CCCCAGAGC CCGTGTGTTA ACGTTTACCA GCACACTACT GGGCTGTTTC  
TCTACCACTT GATGAAATG ATCCTTATGG AAGCACAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTATGCT  
CTATTTTCT TCAACTCTCC AGGATGTTTG AGAGCTGATC TTTCCCTCCC TCTGAGCCT CCTCTCTGC CTGCTTTTA  
GGGTCTCTG CTGACTTTTC TTCATTTCTA AACACATG TN CTCAGGGGT CCTCAGCCCT GCAAGGCCNA TGCCTGGGT  
ACCCAGTCT GTGGCCT

SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGTATGTGAA GTCAATCACT TTTTATATGC AGATAATATG CGACTTATAA TGGAAGGTCA CGTTTCAATA GCAAACAAA  
AAGCTATAAG TAACAAAGAA TAACAAACT ATAAATGTAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT  
AAAATAAAC GNGTAAATG AAAGACAAGA TGTGTGTGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT  
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC  
TATTATGGAG CTCTCAAAGT ATACTG

SEQ ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCTTCC ACTTGAATGC ACTGCCATAT TGTCAAGCTG CATTCCTTAA GCATCACTTC TTAGAGGCCT  
CAAGCTTCTC GGGAAATGTTT GATGACTTAA AGGGGAAATG AACAGGTGTC AATNATGCTT GTCAAGNTTC TTCTGTGAA  
CCTCTATTG GACAATTCAC AAAAAAAG AAAGCAGCTC ATTTTCTAAT TCAGGATATT ATTTCTTTT AAACTGGTA

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SEQ ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCTTGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT  
 TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTTCATC CTGGGCCCTG GCCGATATGC ATATCAACAT TTATACATGG  
 AACTGTGAGA ACATTKTGCC AATAATCATT TAATATATGC CAAATCTTAC ACGKCTACTC TAAACTGCTC TAATGAAGTT  
 TCAGTGACCT TGAGGGCTAA AGATTINTCT TCTGGTGTA GAGCTCTTTG GGCT

SEQ ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTTTCATC AGGCAAAATNA AAGTAACCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACITCC CACTGGCCCTT  
 GGAATAGCTA AGTGCAITGA TTTTGTGTA GTGTGTAGTT TTTTCTTTC ATTGATATTT TACGTATTTC TGGGGTAAAT  
 GTATTTTWA CATGCAITGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCCTCCATCA CCTGAGTGT TTATCATTTT  
 TATGTGTGGT AACATTCCAA GCCCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGTGGGA CTCTCTGTGG ATAGACTGAT TCTTGTITAG AAACAACAGC AAAAAGAAGA AGGCAGGAAA GAAACTCCCC  
 GGCTCGGAGG AATGTCTCTG TGATCCCAT TCTTGATGGA GGGAGTGAAA AGGGGCCCTGG NCTTCGCCCC CTGCTCTCCT  
 GACAGAAACA GTAAGTACCA CCAGGACAGA AGGCAGGAGC CCTGAGAACT CACGGCGCTC TGCAATGGCT CCAGCCNINC  
 ACCCGTCTCC AGCCACCCCT GGAGCGGCCG TGGGGAGGCG GCAGAGGGGG CTTTTCGGAG GGCCCACTAT TNCCACAAGT  
 CTTTCTTTNG ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAATAAGA AAGTGAAATA ATTCTATAA TGTAAGGTTG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGTCTTGT  
 GGTITAGGAA GCATAAAAT ATGTAACCTA TTGTTTATTT CACTCAGAAA ATAAAAGTAT TAATGAAAGG AGTTAGAGAT  
 GAACAGATTG ATACAACTG TTCTATGGIT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA  
 TGTCTTTTAT GCTINTCTT TTTACATATG TATCINTTTG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA  
 CTATTAATAA TTAA

SEQ ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACTNCTA TGAAGCATCC CTCCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA  
 ACACGCCAGA GGCITTTTGA ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAAGA  
 CIGTRATGTG TGGTCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCTTTGTCT GCATTGACGG CCCTGTGACG  
 GCCTCCAGCC CACAGGCCTG CTTTCTCTG TCCTAACACC AAGCCTGGGT GGCAGATGAA CAGTGCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

TTTTTTTTTA CATACAAAGT TTGGATTTT ATTGAAATCT TGTTAGGTAT CAAACAAATT CTGCTTTCTT CAGATAAAAA  
 TATCTCTCA GATGTCTCCA GATAACTGCT AAGICTAAAT TGGTCTTCA ATGTCTTAT TTTATTGTCC TCGTGAAATG  
 TTCATATACA GTTAAGATGT TCCAAAAGG ATTTTATCG TGTAAAGGAG CGTACATGAC GACCTCTACC ACTGCCTCCA  
 CTAACAACT TTCTCTTGA GCTCCACTG CCGCTATTG CACTAGCCCA GGGGAAGTCC AAGTCCCCCA CGACCTCTAG  
 AAGCACGGTT CCGAGGGACT TTGGGGTAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAATNATG CCGCTGCCA CATTTGGTC CATCTTTTT TTTATTATGC TTCTCTTCT TGGACTGGAT AGCCAGGGAT  
 GTTTCANCIT CCGCTCGTC AAGTACGTAC CCTGACCTA CAACAAACA TACGINTACC CCAACTGGGC CATTTGGGCTG

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GGCTGGAGCC TGGCCCTTTN CTCCATGCTC TTNGTCCCT TGGTCATCGT CATCGGCCT CTGCCAGACT GAGGGGGCCG  
TTCTTTTGTG AGAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTTTA TTTCACAAAC ACTAGGAAGA TGGGTTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC  
ACAGAGTCAG CAGCAGCAGC CTGNTCCCG CACTGAGGAC TCGGCCTGGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA  
GAGGGGAGTN CAGNGAGGGC CCTNACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA  
GCAATAAATA AAAGTNNGGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTAAATGAC AGATTTTCCT AAAAGAAACC ACTATAACAT CTGTCCAAGT ACTCCAGAGA AAACAAAAAA TACATAAAGA  
TTAAAGTCT ATTACTTTAA CAGCACATTG CCAACACGG ACAACTAGGA TAAATGCCAA GAAACCTTAA AAAATAACTT  
TAAAGATGC AACGTTCAAG CCATTCAAAC GCGTAGGTTT CACAAACAAC AGGNNACAA GTCCAAGAGC AGTTCTACTT  
GTGCATGATG GTAACCTAGA CTGTACTTCA TCAAAGTTCA TTCAGGTGTT TCATAGGCGT CTGAGCAGAG TTTTGTITTT  
TTCTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAAGAG AACACGCGAA GTTTCAGAG AAAAAGTTGA GGTCTTAATA ATTNTGGGC AACTTGACAG CAGAACAGGG  
TAAAGTGA TTAGCTACAA AGGCTCATCA GAAATGGCA ATAGATTCCA GAGAGATTTA ATAAGTACTT ACAAAGTCTG  
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG  
CACTAGATAA AAAGGAANCC CAGCATACAG TGTTACCACA TGTAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAAGAG AACACGCGAA GTTTCAGAG AAAAAGTTGA GGTCTTAATA ATTTTGGGC AACTTGACAG CAGAACAGGG  
TAAAWTRAG TTAGCTACAA AGGCTCATCA GAAATSGCA ATAGATTCCA GAGAGATTTA ATAAGTACTT ACAAAGTCTG  
CTATAGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGTTTATT ATGTGAATTT TTTACAATAC AAACAAAAAA TACAGAAATG CAATATATGA ATACAGCTAA  
ATGCAGAAATG GTGACTTTTT TCTCTTCAAG AGGCCATGAT TCCCATTTCT AGTAAATAA AGAGACTGCA TATAGGTAGA  
AACAGGTTGG TCATTAGCTT CACAATTTTG CCTAGAAATG ATCTATAAAT GCATTCCCC CCCTGCTACT TACCTAAAG  
TGTAAGAGG GAGTTAAAGG AAAGTTTCCT TGTGTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA  
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGTNGTGAG AAAGCACTTC AGTTTCTTCC CTCGGATATG AACCTGAGCT  
CTCTGATGAG GTGGTTTAGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCAATCTCC TGGCAGATGA  
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCCTCAGGCC TAGCTGCTCT ACGTGTGCGG TGCACAGTGG CATCACATGG  
GGAAGTAGAA AAACCTCTGA TGCCTGTCCC CACCCGGCTT AATCAGAGT AAGTCAGATT ATCTGGGNT GGGACCCTAC  
CATCAATTTT TTTAAAGAAT TGCAGGGGCC AGGGCGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

SEQ ID NO:1674: (Length of Sequence = 377 Nucleotides)



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CTGAAATTTG GCAAGAAGGG GCAAAAACGT GACTATTAAT GATTGATAAG CACCAGTGAA GAAGTTCTAA CTTTITAGCAT  
 GCTGCACAGA AACTGGTATA ACATGCCITC AGTATACTAA CACTCATATG CTCAGTTTTG TTTTGTITTTG GCAGTIGACA  
 AGAAGTTAAT TTGCTTTAGT AAAAATCCCT CATTCAGGCC TTCTATATA AATAGCTCTT TCTTGCTGTT TTAATGTGGT  
 GCACACTATA GCCTCACAAA CCTGTTATTC CAGTGTAATC TGCAGTGTG TAACTAAAGT TACTGGCTTG GGTCTTATTT  
 GCACAGTTTT TGGGNCITGT TTGCTTCTTG CATCTGGATT AACTAGGAAT ATTCTC

SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGTCAA TCAGCTAGC ACCCAGTCT CAAAGACCTC ACATGCTAGG GAAGGTGCGG AGGCAGAGTT GTGGTTCAGA  
 AGCAGTTACA GGCTCAAAG CAAGAACAGC AGCCAAAGCT TCCAGCCCT GACGCTGCCT CTGAATGGTA AACCAATGGC  
 ATATGGTATC CACAGCTAGG CTTTGCTTTT TTCTGAGTGA AGGTAAAGG CATTTGAAA TAAACCAAAG TTTCACAGAC  
 TATGTTTATG GAACAAACAT GGGCCATTT CAGGGATATA AAAGTCGATG TTCTATGTAG GCCCCATAT GAGTATTTAT  
 CTACTTTTAA TTACTTTAT TTATGGAAT TTATTGNC AAGGGCTCA CTCGTTCGG A

SEQ ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTGAT TGCTTGAGC CATCACAGT TAGCTCTCAC AGCTTTAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA  
 ACACCATTC GACTCTCAA GAACATTATC AATGTACATG GATAGCTTC AACTTCATAA GGTTTCTC TCTACCTAGA  
 GCAATTACA TTAATTGCA GAATAGTGT TATTGAAAC CTTGTGTAT CTCCAACAA GTAATAGTGT ATTGATTTCA  
 TTCTACTAT CTCAACTGT ATCATTAGA GGAATTTCTT AGGNAAGTCT ATATGCAGTA AGCAAGTAAG ATGCAGAAC  
 ATCAAAGGN GGAAGTAAAT CCCAAACTG GNTTTACCT TCCTTCCCT TAGGTGAGGG AAAGGAATTT ATGGTTTTAA  
 AGCT

SEQ ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGAACACT ATGAGCCAGG AGTCTACACA GAGAAGGTTG TGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCAGG  
 TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG  
 ATGCTTCCCG CCTGGTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTTNGAT  
 GACTCTGACT TTGAGACAGA AGATTTGAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG  
 CCCAGAGTIG CCCCAGGCGA TCATGCTCA AGCTTCCCA GGGAGCAAAA AAGCCGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAAGTGTGCA AATAATCCAT GAATATATTG TTTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCTCA  
 TCCACTCCTT CACTCCATTG CTACACTTAA AAGCCTCACA TGCTCTCTG TCCTCTCCA AGGCAGCTGC TAGCATCAGC  
 GCCACAGTA GCCTCTTTT GTTCTCTGTT TATAAACCAT ACATTTCTA TGGCTACACA TACGTGTATT GTTGTATGCT  
 TTCTAATAAA ATGTATCAT AGTGGTACAC ATCTTTCACA CTTTCCINAT TACAGTCAAC ATTTGGNGGA ATACAGAAATG  
 CAGCAGATCA AGGANTTTT CTCAGTCTT TCTAACATGN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGNGGCT  
 CATTGGTTTT CACTCTACA ACGGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCCTGCTGCC TGGCCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCTCA AATCCACCTT  
 GCAGCTCCTT GGCTGCAAT ACACCTACTC CATCTTTTCA ACTCGCTCCC TGGACCCCTG GTTAACACTT CACTGTAACT  
 CCTCAGTGT ACAAGCATT TTCAATTGAA TACAAAGGC AACTINGCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA  
 CTGAATTNA GGCTCA

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CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG  
TTTTATAATT CTCATGTCCT GATCAGATCT GAAGGGAATA GGCATACCCT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTTATT ATGTACAACA TGTATTTTGA GATATGTATA CATTGTGGAA TGTCTAAATT  
GAGCTAACAA ATACATTATC TCACATACCA TGTTTTTTTG TGGTGACAAC ATTCAACAAT ATAGACCAAT TCACAAATTT  
GCATGTTATC TTTGTGCAGG GGCTATGCCA ATCTTCTCTG TATTTTINCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA  
CCCTAATTCC TTTCATTTAA GGNCTAGTT AACCTTTCTC TTAAGTATAA CCATGTATTT TGTTAAGCAA TATCTTTTTA  
TTACAAAAAT GCCATTTTTT TCTGGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCGGC TGCGATGTG GAAATTTGTT TTTGGGACTT CACCGTTACT CTGACAAGCA CAACGTGCCG  
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAATTC AGAGAATATA  
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTTATTT TAATATATCG TAGGAAAACA TTAAGAGCA GATGCATGGC  
CATTTTNCIT TGATGTTCTC CAGAGTTTAA CATTACACTT GTCTGTCTTA TAATGATAT TTTAGGGATG TTTGGGTGTT  
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACTTT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC  
NCCGGGCTG CCCCAGACCC TGGTTTCCCT GAGGACCAAC GTGAATGGGG GCCCCTGAGG AAAGATGCTT GGGGCTGCAG  
AGCGGATGGA ATGCAGGCC AGGTGTCTGG GTGGTGCCCT CAGCTCTCGG CAGGGTGTAC GGGTGGTGGC CGCTGGGCTC  
TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCTGCT CGTAGTGTGC AGTGAACCAA  
GCACAGGTCT CTTGACCGN CTGCTTTNAA GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTTGAAC TGGACATCCT AATGATGCAA TTACGTCATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAC  
CATCGTGTCT GTCTGAGAG GCTCCACAAT GCCACCCGC ATCGCCATTC TGATGCTTC AGGGTCAGCT GTTGATAAAG  
GGGCAGGCTT GCGTATTGG CCTAGATTTT GCTGCAGATT AAATCCTTTG AGGATCTCT TCTCTTTAC CATTPTNCTG  
CGTGCTCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTCGTGTCTG TCTCTCTCTC TCTCTGTGTT  
TCTCCAGCC CTTGTCTCGG AGACGGTGT TTCTTCCCTT GCCCATTATC TTTTCAACTC CCAGGGCTAC CCATTTCAAT  
GGTGGGTCGT T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAAG CAGATTGGT ATTACAGAAA GCCTGCAAAT ACAACATTC TTAAGAGAAC  
CTGTAAACAC GTTTGGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGGAAAG  
GTGACAGAAA AGGAGAGGGA AGGATGNGA CAGACATCAC CTGTGGTCTC TAAGGGGGCC NIGTGTITTA TTTATAAGGT  
TTNCTNCCCA CAGGAGTTCT NNTGTGATCT ATCCGTTTAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTCTTTCAT TTACAAGAGG AATATATTTG GCTTCTCTCT TAAGACTCTG AGATTCAACA TCAGCAGCTC TAAAAAATAA  
AGGAGCAGTT TGGCTTCCGG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGTACAA CAAGAAAACA TCGCTGGGGC  
CCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTGGA GGATGCCACC CCCACCCCAT CCTCTTGTC GGCCTCGGG

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TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTTTAAC AAGGGTCCTG GGTTCCTCTT TGCAACACA GTAGGCTTAA  
ACTTTGCCTG CTTTTTAAAA TGGCATTTT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGCTTCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGTTAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT  
TGCCCTCAAAA TTGTGTCCAC ATAATCCACG CTCATCTTGC AAAGCGCTAT TTCAGGCACT TTTTTTTGAG AAAGAGTCTC  
ATTCTGTGCG CCAGGCTGGA GTGCAGTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCCTC CCGGGTTCAA GCGATTCCCC  
CGCCTCAGCC TCCCGACTAG CTGGGACCAC AGGCACGNAC CACCACGNCC GGCTCACCTT TGTATTTTAA AGTAGAGATG  
GGGGCCTCAC CATATTGGGT CAGGCTGGGT CTTCAATCTN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CTNCCAAAAG  
TGCTTGGGGA TTANAGGGAA TNGGCCACC GGGGCTTGGG CCAAT

SEQ ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACAAA TAAAGCAATA ACTTTAAAGA CCTCAGACAC ACACAGTATA AACACCTGGG TAAGGTTTTN TCGTGTCCA  
TGTTGACACC GGAACACCG TTAAAGTGCA AGTTTGTGT TGTGTCTCTT TGTGCAGTTT CACTCACATG TAAACAAGTC  
ACTTGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTTGAG CAAGTAAAT AGTAAAGCAC ATAGTGAGTG  
TATGTCCATC TAACGGTAC ATTGATAATT TAGTTTGGGC ACATAAAAGG AATATTTATA TGGCTTCCCA AATGCAGAGT  
TACATCTTAT TCGTGATTT CTCTGAGTAT TTATATCCCG TCTCCTTTTT TCAATCTTAA AAATAAATGA ATTTTCACTG  
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATTCATAAT TTTTGCATAT ATTGTAAATG TGTCTGGTAT  
TTACAGCAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGCATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTTCTGTGCG ATCAGCGTAT TCCTAGATTA GGAATTCAAA TTAATGAAAA TTCACATATG AAAGGAAAAT CCATTGCTAT  
TTCTGGAGAG GACCTCAGTC CTGGGCTTTT CCCTGGCAAT GCTACCTGGG TGGGTGCTCA CCACTCAGGT GCTGGTGTG  
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAGGC TAAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC  
CCGGGACTTA TGGTTAGCCG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCTCAGACT GCTCTTCTC ATTTTGTCT  
GATGAGATAT TGACAGTCAT GTCCACCCGC TTCTCATCC ATTTCCCGTC TTTGGGCCCT GGAAGTACG GGGGCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGINATATAC CTTTAAAGT AACTAATGCA ACTGCCAAN AGGGACAGTG TCAATATCAT TGNTTCATT AGAAGGACGG  
CTGCCCCACA CTGTNAGAAC ACTGCTGTTT CTACAGTAG TTTACTTTNA GAGGGATGTA AGAATTAGTT TNACCTAAT  
TCCAGATGTG CATGCTCAA AAGAAAAATC CCAATCTCCT TCCTTTTGGG GAGCACTTTT GGTGGCACCA AGGCTGGTGT  
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGACTTGGGC  
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATCTCCC AAAGTGCTGG GATTATAGGC GTGAGCAGT GCGCCAGCC TTACTTATTT TTAAATCAGA TTTTTAATC  
AACTAAAACA GCTATGAGTT AAGTACCTGC CCTGCAAAA TTTTATAGAA AAGTTTATAG ATTATGAAAT TAAGATTAT  
TTTCCCTAAC TGAACAGTT CTAAATTTA TCTGATACTT CTCTAACAAG TGAGTGATCT CATGTAACCC CAGTTTGTAT

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CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG  
TTTTATAATT CTCATGTCCT GATCAGATCT GAAGGGAATA GGCATACCCT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTTATT ATGTACAACA TGTATTTTGA GATATGTATA CATGTGTGAA TGCTAAATT  
GAGCTAACAA ATACATTATC TCACATACCA TGTTTTTTTG TGGTGACAAC ATTCAACAAT ATAGACCATT TCACAAATTT  
GCATGTTATC TTTGTGCAGG GGCTATGCCA ATCTTCTCTG TATTTTTNCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA  
CCCTAATTC TTTCAITTA GGNCTAGTT AACCTTTCTC TTAAGTATAA CCATGTATTT TGTAAAGCAA TATCTTTTTA  
TTACAAAAAT GCCATTTTTT TCTGGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCTGGC TGCCGATGTG GAAATTTGTT TGTGGACTT CACCGTTACT CTGACAAGCA CAACTGTCCG  
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAATTC AGAGAATATA  
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTTATTT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATGGC  
CATTTTNCIT TGATGTTCTC CAGAGTTTAA CATTACACTT GTCGTCTTA TAATTGATAT TTTAGGGATG TTTGGGTGTT  
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACTTT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC  
NCCGGGCTG CCCCGACCC TGGTTCCCT GAGGACCAAC GTGAATGGGG GCCCACTGG AAAGATGCTT GGGGCTGCAG  
AGCGGATGGA ATGCAGGCC AGGTGCTGG GTGGTGCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGGC CGCTGGGCTC  
TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA  
GCACAGGTCT CCTTGACCGN CTGCTTNA A GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTTGAAC TGGACATCCT AATGATGCAA TTACGTCATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAC  
CATCGTGTCT GTCTGAGAG GCTCCACAAT GCCACCCGC ATGCCATTTC TGTAGTCTTC AGGGTCAGCT GTTGATAAAG  
GGGCAGGCTT GCGTTATTGG CCTAGATTTT GCTGCAGATT AAATCCTTTG AGGATTCTCT TCTCTTTTAC CATTTTNCITG  
CGTGCTCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TCGTGTCTG TCTCTCTCTC TCTCTGTGTT  
TCCTCCAGCC CTGTCTCTGG AGACGGTGT TTCTCTCCTT GCCATTATC TTTTCACTC CCAGGGCTAC CCATTTCAAT  
GGTGGTCTG T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAAG CAGATTTGGT ATTCAGAAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAC  
CTGTAAACAC GTTTGGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGGAAG  
GTGACAGAAA AGGAGAGGGA AGGATGNGA CAGACATCAC CTGTGGTCTC TAAGGGGGCC NTGTGTTTAA TTTATAAGGT  
TTNCTNCCA CAGGAGTTCT NNTGTGATCT ATCCGTTTAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTTCTTCAT TTACAAGAGG AATATATTG GCTTCTCTCT TAAGACTCTG AGATTCAAA TCAGCAGCTC TAAAAATAA  
AGGAGCAGTT TGGCTTCCGG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGTACAA CAAGAAAACA TCGCTGGGGC  
CCCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTTGA GGATGCCACC CCCACCCCAT CCTCTGTCA GGCCCTCGGG

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GTACCCAGAG GCTTNGTGGG TGAGTATTCC ACCTGCTTAC ACACCACTGA AGCCACAGCC AGCCAGTAAC TAAGGGGCAA  
GAAAGAGCAT TGTCGAAGCT GGCTCTTTNG GGGGGTCCCC CATNGGCCA CAAAGGCCTC ACCCCCCACC CCATCCCCGT  
AACCAGAAAC CACCTTGA

SEQ ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTTTATTG TTTATTTACT TATTTTTTAC CCTTTTTTCA AGAGATGGGG TCTCACAGTG TTGCCCAGGC TGGACTTGAA  
CTCCCACTCC TGGGCTCCAG CAGTCCTCCT GCCTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCA  
GCAATATTTT AATTTCGTGA ATGTGTCAIT TAGCCAGTGA TTGTGTATT ATAATAGAAT CACAGAAATG GAGGGACTCC  
TAGAGGTAAT CAAATCTGGT GGTTTTTAAG CCTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT  
CCCAATTATG TAAGCCAGRG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

SEQ ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGTACATGTG CACAACGNG GNGTTIGTTA CATATGTATA CATATGCCAT GTTAGTGTGC TGCACCCATT AACTCGTCA  
TTAGCATTAG GTATATCTCC TAATGCTATC CCTCCTCCTT CCCCCTACGC CACAACAGTC CCTGGTGTGT GATGTTCCCC  
TTCTGTGTG CATGTGTCTT CATTTATCAA TTCCCACTA CGAGTGAGAA CATGCTGTGT TTGGTTTTTT GTCCCTTGGA  
TAGCCAGATG CAGCTACTCT TAATGTGCAT ATTTTCATCC TAGAACAATG GAGAGTTCTT GTAAAAGCCT TGTGTTCAG  
GAGGAAGGAG ATCTTGACCC TTCTGCTGAT GGCAGCAGTC AGGGG

SEQ ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAACT CTCCTTATAT GAGAACAATTA TTAAATTCCA TTGCTCATGG  
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCCTCCCTTT CACCCTCTCA GTATCTCCAG TTTAAAACCT  
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAAATCA GGCTACTAAT CCTGTGTGCTT ATATAGATGA AGACCAATTG  
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACAT ATAAGCTTA  
TTTGCTCTAG GGGCCTGGGA AAACATTGAG GACCCAGGGA ACCTCATGCC CTTCCTTTTAG GTTCAATCAG ACAACCT

SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCTAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCACTT GGCTTCTACC ACGTCCAGAA  
CATGCGAGTG GAGGTGACCA AGTCCTTCAT TGAGTACATC AAGAGCCAGC CCATGTGTTT CAGGTCTTTT GGCCACTACC  
AGCAGCACCC GTTCCCGNCC CTCGCAAGG ACGTGCTCAG CCCCCINAGG CCCTGCGGCC GTCACTTCCC TCGGGTCAATG  
CCACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCTGTGTG AGCACAGTTT TATTGCTGT GGAATCCATG AGAGCCGGAA GCATCGTTGG GGCCGTGGCT AGCAGAGCTC  
ATGGTGACCA GTCTGGGCC TGACCAATGG GTGATTACAT TTAAAAACCA AAACAAAACA AACAAAATA CCAAGAACAG  
ATCACTTGCC ATGGACATCA GTAATCTATT GGTAAATGGTG AAAATTTTCAT GAAAATTTCC CCTAAACCAT AACAAAAACT  
GTCTCTCTTA CCCCCAAAGT GCTGGAGGGA AAGATGGTGT CATGGCTTTG ACCTCTCTTT GAACCTGAAA TGCTACCTTC  
CTACCCGGAA AATGCGGCAC ACTTACTT

SEQ ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCCGTC CTCCAGAAAG CTCACATCCT CTTACTCATG GCAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT  
GTGGCAGCAG ATGTAGTATG CAGTGCAGAG GTGGCCATGG TTGCNAGGCG AAGGAGGGCT TCCTAGCATG GGCGTTATTT  
GACCAGAGGC TGGCGGTGGC TTTTGCTAGC AGTGTGATG TATCTGAGC CAGGGACAGA TACCTCTNTG AGCCTTGGTT

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TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAGT AACAGATGTT  
GCTTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTCAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC  
AAGCAAGTTC ACCTAGAGG

SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTGGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC  
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC  
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GCGCGCTCAG CGCCAGGNTC GCCTCACAGT  
GGGGGTGTAC GAGTCGGCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTGGGCCATT AACGAGGAGG  
AGGAGGATGA CATCGCCTG CAAATCCACT TCAACGTTCA TCCAGTCCT TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCATAT TTAGTCCATT TGGTGAGGTA ATGTTTTCTT GGATGTCTT GATGCTTGTA GACATTTGTT GATACCTGGG  
CATTAAAGNG TTAGGTATTT ATTCCAGTCT TCACAGTATA GGCTTGTTT TAGCCATCCT TTTTGAGAGG ACTTTCCAAG  
AATTCAAAGG GGATTGAGTG TTGTGACCTA AGCCTATGGT CACTGCAGCC ATTTCAGCAC TAGAGAGTGC CTAAGCCCC  
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATTT TGGGAAAATA AGGGAGAATT CCTGGGGTT  
ACCAGGTAAA AAGTCTCTCC CACTTCCCTC TCTTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG  
GGGAGGGATA AGGCGGTCAC TCTAAT

SEQ ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAAATGTT AAAGAGTATC TNCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT  
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATCCC TGCAGCATCT GGGAAATGGAG  
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGNTCGAAA GACCACTGCA  
CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTTG CAGATGTAGT  
TCCAGCAGTC AGGAAGTGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTGAGGCA CAGAAACTGT  
TATTCGGGCA TT

SEQ ID NO:1707: (Length of Sequence = 434 Nucleotides)

GTGTGTCTGC AAAAAAAAAA AAGATTCTAG GCATGGTGGT GTGTTGACTG TAGTTCCAGC TACTCCAGAG GCTGAGGTGG  
GAGGATTGGT TGAGCCTGGG TGGATGAGGC TCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA  
GAAAGGAAAG AAATCACTGG CTCTTCTGTA AAAAAATGATC TGTTAAGAGT AATTGAAAAA ATAAATACAA GTAATAAAAT  
AATCTTTCAT TTAAGAAATA CTACCAAAT TAACATGGAG ATCTAGCAAA AAGTCAAAAG CAGCTNCGCG TGGTGGCTCA  
CACCTGTAAT CCTACACCT TGGGGAGGCT GAGGCGGGAG GNTCGCCTGA GGTCAAGAGT TCGAGACCAG CCTGGCCAAC  
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGGAC TCCAGCACCT TCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG  
AGGGACTGGT GGAAGGCGAG GATTATGTGC TGCTCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG  
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTCGAA GTGTACCCAG TAGAACTGCT  
GCTGTCCGG CACAATGATT TGGGCAAATC TCACACTGTT CAGTTCAGCC ATACCGATTG TATTTGGCCTA GTATTGCGCA  
CAGCTCGGGA GCGGTTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGGATAGG  
TTCGTATGAC ACACACATCA CGTTTCTCGA TGCGGCCCTT

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGTCCTAT GTAGAATTGC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTNAGAC CATTCCGGCAG CTGCTTTGGA  
CACCTGGAGC CATTTCTTTT ACAGATGAAG ATGCATTGIG TCATTGTCTC AGGATCCTCG TCCTGTTGCT TCTCTGGCCA  
CAAATTGTTT TTTACCAAAG ATGATTTTAT TTCACGTGCT TTGAAAATCA TTCITTATAG GTAGAATATG AAGATTCTCT  
GAAATGATTC CAAATGCCA AACTCAAACA CTATTGTCCG ATTTCITTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT  
TGTTTGTGA TGTGGGGCG TTCATCAGG AGAGAATTG AGATAAGTAG GAATAGCAA TAGGAATAGT GAAATAACCT  
AGAT

SEQ ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTGATCTGC CGACCAGAGG CCTTAACTC TGGTGTGAG TACTACTGG ACCAGCTGAA CGAGACGGTC TTCCTGTCC  
ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT  
TGGGCTTCAG CCGACCTGCA CTCAGTG

SEQ ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGGCATGT NATCATTINA ATGATGINAT CTTGGTGT TTCCCTCAITA GCTGTAGACT ATCCCTCTC CTCCCACCAC  
AATGTTTCTA TGATGAGTA CAAACAGAAA GGAAATCACA TTTTCATACT AAAAACAAAA TGATCAGAGC CTTGATTTCT  
CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG  
GGAGTCTCCT CCCTTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CCCCCACAG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTGGTGGT TTCTCTTTA TTGTGTGCT CCTACCTTCC CCCACAATTT CAGTCCCTTC CAACACCCCA AAAAGAAGGA  
GTGAAAGGAA GGGATTGCTG GGGTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC  
TGATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCANTG GGCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG  
GGACCTCGCT TTGAGTAGCA AGTGTITAGG CCACTTACTA GCAGGAATA AGCACAGTAT CCTACAACAG CAAATGTCTT  
TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCC  
AGTGGCACTC TGT

SEQ ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGACGCTG CTTTGAAAAA TGACTTGGCA GCACCTCAA ATGTTAAACA GAGTTACCAC ATGACCCAGT AATTTCACAC  
TTAAGGATAT ACTCAAGAGA AATGAAACT AAAACATAC GGCTACCCAA AACTTACAT AAGANTGTTT ACAGCAACAT  
TATTCATAAT AACCAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMTGGGTAA AGTCTGGCAA ACTCACAGRA  
TGGRATATTA TTTGGTGGTA AAAAGGAGTA AAGAACTSN ATGTACTACA ACATGGGTG

SEQ ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTTTAC CGGGCGGTTT CTGAGTTTAT TTGGGGCACA CCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTTGGGCC  
TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GGCGCAGGAC CCGGTGGGCG AGCGGGAAT TGATCTTGA GTGTTGGAAC  
TGCTTGACAG CCGGCCGGCG GCACTTGCTG GCGCGATCT CCTCCACCTT CATGATCTGA ATGGAGTGGG CTCGGGCGCG

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GTGCCGGGCA CCCATGTCTC GGTAGCACTG GGTGACAGCG CCTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT  
GGGTGCCGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC  
CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCTC GCCCGGAACC CCTACTGTGC TTKGAGCGGC TCCAGCTGCA  
AGCAAGTCAG CCTCTACCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT  
TNCAGCGCGT CTTGGGTTGT TTCCC

SEQ ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCGC AGCCCTCTGG CCCCCTCCAT CTCTGTGTCG TTCCCAACCA CCCCCTCTCT CGGCCCGAGC CTTTTCCCGG  
TGGGTGTCAG GNTCACTCCC ACTAGGGACT CTGCGCTAAT TACCTGAGCG ACCAGGACTA CATTTCCTAA GAGGCTCTGC  
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCCGCGGGG CCTGCTGGGA CTGTAGTTG CCTAGACAGG GCACCACCTT  
GCACTTCCCG ACCCGCGCTG GAGGCGCGT GAGGTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC  
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGGC TGCAGAACAC TGTCAGGTGA CCTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTTAAA  
GAAGCATGAG GAGACTGAGT GCCCTTTCG GCTTGCTGTC TGCCAGCACT GTGATTTAGA ACTTTCATT CTCAACTGA  
AGGAACATGA AGATTATTGT GGTGCCCGGA CGGAACATATG TGGCAACTGT GGTGCAATG TCCTTGTGAA AGATCTGAAG  
ACTCACCTG AAGTTTGTG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGGATGAAT  
CTTNGGGTCA GGATGGAATC TGGATTGCAT CCCAACTCT CAGACAAATT GAGGGCTCT

SEQ ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTTG TTAAATTTAT TTAAGACCAC CTCCTTACAA CTTCAGAGA GAAAATACAA AACAAGAAAC AGACTTGGTT  
TCAAATGCAT AACCAGGTGC TGGAGTTTAA AGCATTACTG ATAACATTGT TACAGAAGAA TGGCAGCTTA CTCCAGGGCA  
CTTCAGTATT CCTGAGGAAT AAACATGATT TCGGAAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCGGG CAGAGGGAGC ATGACGGGA GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC  
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GNCCTGGGG CTAKTCAGGA  
AGAAAGGGAA AGGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

SEQ ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGACGGA TGTTTAAATG CAATTCGTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CCGTGGAGCC GGCAGGAGGC  
CCCCGCGCG NTAGAGAACC ACAAGCCCG CCGTGACGCC CTCCCCGCG CGCCTTAAAT AGATTCTTCA CTATACTCTG  
TATGTTACAG TATGTACAAG ACCCTCCCC TCGGGGACG GGGCGGACTN CGCAACGNGT TCCTATGTAC ACCACCTCCC  
CTTTCGGCCC TGAGGTCAGT GGCCAGAGTC GGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAAACAT  
GCGGAG

SEQ ID NO:1722: (Length of Sequence = 291 Nucleotides)



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TGTTTTTAAA AATGAGAAAA TTGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT  
GGATATAATA TTAGACTTTT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAATT TACAATTGAC  
TTTTTGTATT CTCTTNTCTG TCATTACAAG AATGAGATGG AAACCAAAT AGTTGTINCCA TCCTCTTACC CAAAGAGGGA  
TACTGAAAAG TCCGGTATGT GCATGCACTT GTTCTCTCGG GGTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATGCCCCC TCCTCGATT CCTTCCTGTT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTGTCTTAG  
CCCCATTACC TTGGATAAG ATTACCGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTTA TGGCATTGAA AAAGCTGTTG  
TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCCACAG TGTTCTTAGA TCGCCTTGCA GTGATATTTA GGCATACCAA  
TCCCATTTGIG GAAAATGGAC AGACTCATCC GTGTGAGAAA GTCATACAGG AAATATNGCC AGTTTTTATC CGAGGACTCT  
AAAATAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTCAGG

SEQ ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGTATGTT AGTTCGATT CTCAAAATTT TATACATATT TACTTTCTGT TAAAGAGAAA AGGATAAAAT GGTATAAAAA  
AAGATAAAGC TATTAATTAA GCACGAGAGA GAAGATAAAT GGATATTTTC CCTGTGTGAG GCTAAGACAG AWGCAAATCT  
CGTTANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAAC AAAAGCAGTT ATAGANCCCC T

SEQ ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAAGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTTAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT  
ACACAGGGAA AGTACATTA TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT  
GCCTACCCAA ACACGCTTA GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCCGAGAGC  
ACATGTTACT KAACATGAAG AAAGCATACG GGAAAAGCGT GTKTACACAT GNGCATGTTT AGTGGGGCAC ACGCAGG

SEQ ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCCGGA GTCCTGGGAA TCCAGGAAGT CGCAGAGCAG  
GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCCGAKT TCGCGCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT  
GCACGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA  
TCACTCATGC CCTGGACGTA GCGGAGGTCG AAGTGATACA TT

SEQ ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGTATTGAT TTCAGGCAGG ACCCAGGTCC CAAAATGTTA GAAACAGTTA TCCTTTTTC CTCTGAGTTC GTTATTCTCT  
GGGGCCCCAG TATCCGTGGC TTAACAACCC GGCTGGATAG AAGGCACCTC TTTCCTCCAG TTCCAACAAG ATCCAGAGC  
TGCTTCTCAT TGGCTCGTCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CCGAGTCATG  
TGCCACCCCC TGGGATCCA GCTGTGGGNC TNCCTTAAAC GCATT

SEQ ID NO:1728: (Length of Sequence = 394 Nucleotides)

TTTTTTTGAT GAGGAGATAT AGCAAAGGGT CATTTGCCCC TCCTTCAGAA AACTTTTCTC CAAATCTCCT TTAAACATAC  
TGCCCTTATCT TTCCCTCCAT AACTCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC  
GATTCCCAGC ACAAGTCTAG TCCTGGGCGA AACTTCCATC TCTTCTCTCG CATACTCCT GTCTGGGTAT GGGGATAAGG  
GAGAGTATGG GATTTTGTTC TCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAAT CAGAACAGAC  
AAAATGATAT CCGGTAAAAC ATGCAACTGA GAGCAATTG GGGAAAAATC CTCAGGNCAC AAAATGTATT ACTG

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SEQ ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAGTTAAA GTATTATTG ATGTGTTTAA ACTGTGTACA TTCTCCACAG ATCATATTAA GNGTITTKTA GKGGAAGTTT  
AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAA ACAGTCACAG  
GAAAWTAAA ATACACCMCA GGTTACCAGA ACCTTCAGGT TTAAAATAAA ANGNAAGNAA AAGCAGAAGC AGTGAGCATC  
GGCATCAACC TGTACAAGCA TTACAAAAGG CTCCTGTGAC GGAAACACAA TTGTTCAAAG G

SEQ ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACGRACGCT CTGCCCACGC OCTGAGCGTG TACACATGAT GTNTTCTATG CATTACACCT GCCCCCAGC CCGCCCTGCA  
GAGGACAAGA TGGGTGGCCC CGGCTCCCTT TCCCCTAACC GCCCCGCCC GCTGTGCAGC CGTGTGGGTT GCGGTGTGTT  
TCTGTGTAC TGGCGTGTCA CGTGATGTAG CCGTGTGTC TGACATGAGC CCGTGCCCC TTCTCTGTTT CTCCGTTGGT  
TTCTAGAGCT CTCTCCCTCC CTTTCTCAGA GGGGACAGGA CTCTGGGGT CTGGCTCGGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGTTCCGGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TCGTGGGCTG  
CGTCATGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGCGCGGC CCAAGAAGCG GGCGCAGACG TTGCTGTCA  
GCCACCACGC GGTATTTCG GTGCGGACG GCAAGCTCTG CCTCATGTGG CGCGTGGCA ACCTGCGCAA GAGCCACATT  
GTGGAGGCC ACGTGCGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA  
CCTCAACGTG GGCTATGACA TCGGCCTGA CCGCATCTTC CTGGTGTGCG CCATCATCAT TTINACGAG AT

SEQ ID NO:1732: (Length of Sequence = 352 Nucleotides)

GTACCTAGTA CCTAGATAA AGGGAATGT GTGATCTTA ATGAGCTTTA AAAGGAAACA ACTTCTTTTT TTTTTTTTT  
TTTTTGAGAC GGAGTCTCAT TTTTGTCCCC CAGGCTGGAG TGCAGTGGCG CGATCTCTGC TCACTGCAAG CTCGCGCTCC  
CGGGTTCACG CCATTCTCCT GCTCAGCCT CCCGAGTAGC TGGGACTACA GGCTCCCAAC ACCACGNTCG GCTAATTTTT  
TGTATTTTWA GTAGAGACGG GGTTCACCG TGGTTAGCCA GGATGGTGTG GATCTCTGA CCTCGGTGAT CCACCCACCT  
CGGNTCCAA AAGTGCTGGG GATTACAGG GT

SEQ ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTGTGTT GTTGTGTTGT TTGTTTGAG AGTCTTGCTC TTGATCTATC TCCCAGGCTG AAGTACAGTA GTGTGATCTC  
GGCTTGCTGC ACCCTCTACC TCCCAGGTTT AAGCAATTCT CATACCTCAG CCTCCTGAGT AGCTAGAACC ATAGGCACAC  
GCCACCATAC CTGCTAACTT TNCIATTTTT AGCAGAGACT GGATTTTGCC ATGTTGGCCA GGCTGGTCTC GAACTCCTGG  
CCGCAACTGG ATCTGCCCAA CTCAGCCTTC CAAAGTGCTG GGATTACAGG CATAAGCCAT TCATGTGCGG TTKITCAACT  
G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTTT ATTATGAAAC ATTAAATTTT GACACATTGC CTCATTGCT TTTTAAAT CTATTATCTG  
ACTTAAACCT ATTACGAAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAAACTAGGA ACATAATATG  
TTTTATGATA AACAATAATA CTAAATCTGA GTGTATGAA CTGTTAAC

SEQ ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTATACGT TGGTGAGTTT CTAAGGGGGA AGCCGGCCAG GGAGCGAGCC CAGAACGGAC  
CGGACGCTG TNCACCCCA GCCCTGCCCC TTGGCCGAG AGGCCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC  
AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGGAACCCCC CCCACCCCGC CTTCAGAGCC CTCCCCCTTG GACTAGAGCG

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GCTGGGCAGA GCTCTAAACA GGGGCAGGGG CTCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCTTGAA GGGGCAGGAC  
CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGA GGGGAACAAC ACACACTGGG GCTGTGTTGG GAATGGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG  
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCCTATA ATCCAGCAC TTTGGGAGGG  
TGAGGCGGGC GGWTCACGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC CCGCCTCTAC TAAAAATACA  
AAAATTAGCC AGGCATGGTG GTGCGTGGT GTAATCCAG CTACTCAAGA GCTNAGGCA GGAGAATCAC GTGAACCTGG  
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTTCTAA TGATTTTAA TTTTTCAGAG GAAAATAATT TCAAGAAATA AAACCTAATT CCCCTGAGTC CTTATTGAAT  
TAAATATTGA AAAACAATGA ATGAATGATG CATTCTTATT AATGGACTGT AAGAACTGA TATAATGGAC TTCATTCTAC  
AATTCGGTTT CTATTGTCT TACACATGCT CCTCGAAGTT AAACATTTTA GGACCTTAAC ACCATTTCCT TAGTACAATT  
ACTAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGGN AGATGTGAGG  
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GGCACCTGG GCATGTCCAG CTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCTGG AGCCGGCTGT  
CGTGGATGCC TTAAATCAAG CCGGCATTT GGTGTCTCAC GAATGTCCCA ACTACTTCCT CTAGGCCCAT CATGGCTCAG  
GCTGCCAAG GCTTTTNGT CACCTCTTT GTTCTCTCAC ACTGACAGT CTGGCCTTA AGCTGACTTA GAAGGGTTT  
TCTGAATTGT CTAGATCCAT GCATTATTT TCTAGCTTC TGCCTTGCTC CCTATTCACT TTACTCTGTG AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA  
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA  
GGCCTCGACC AGATTCAAGA CCAGCAGTTA AAAAAGAATC AACTTTGCCT CCCAGGACCT ATTGGAAGA AGCTAGAGAG  
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTGAGGCC GAGGTGAATA TTAATCCAGA GGGTCGAAGC TATAGAGGT  
CTTTATGGGA GGGGCGTGGC AGNGGGTGG TAGGGGACA CACTTCGAGA TTATCTCAG TATANGGGC AATAAGCC

SEQ ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAATCA GGAAGAAAA  
AAATCCATC AAAAGTGGC TAAGGACATG ANTAGACAAT TTTCAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA  
AAAATACTCA ACATCCCTAA TTATTGGGGA AATGCAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG  
CCATAATTTA AAATCAAAA AATAATAGAT GTTGGCGTGG GATGTGTGA AAAGGGAACC ACTTTTACAC TGCTAGTGGG  
GATGNTAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAAATGCAA AATCAAGACT TGTCATAAAN TGTATGTCCA TAGCCTATAC TGTTTAAATT ACTNTAATN TATAGTAAGT  
CTTGAATTT AATACAGCAA ATGTTAAACC AAGCTTTCAC TACAGAAATA AACAGAAATT TATAGGCGCT CATTATCCTT  
TTAGACAAAG TTGTATTGC TTGCTATTR TTTTGTITA GNTTTTGTG AACTATTCA CAAACAGGA CAAWRATATT

TAAATTGTTA ATAGAARTTT CCAGTTTTCT TTAGTCTCTG GCTACTCCAA GTACTGGTIG CTGTGAATGA CCTTTTCATG  
AG

SEQ ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCCAGCC AGGAAAAAAA AAAAAGCTT TGAGGAATGA GAGAGGGTGA GATGGGTGGA AGAAGGTGCT GGGCAGCCAC  
GGGCGCCACG CTCANTGGC CCCAATGGC GAAGCCGATC TCCTGCTTGT ATCTGTTAGT GAGGATGTTG GCTTTGCGCG  
TNAGTTTGA GAGCACAGTG TGCAGCCCGC GCAGGTGGTA GTGGAAC TGTTCAGGT CTTCTTGGCC GCGTCCGAA  
CCCTCCAAGT GCGCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG  
CG

SEQ ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGGTAGGG GGCCAACGCA GTCACCGCG TCCGAGTCA CAGTCCAGCC ACTGACGCA GCAGCGCCT TCGTAGAGC  
CGCTTGACG GAGAACTG AATTGCCAAC GAGCAGGAGA GTCTCAAGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA  
GCACCTTAC CCATCGCGAG TTTCCGGGCG CCAAAGCCAG GAGAAGCCG CCATCCGCA GGNCCGNGTC TTTCAGCGAG  
ACGNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTCTTTA AAAATAAAAA CCCACAAAA AAGCCAGAAC ACCCTACCA ACCCAGCCCA GTGTAACAG  
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTCGKCCGA  
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GNGCAGGCA TGGCACCTT CGNCACGAG AGCAAGCATA  
GGCTGTA

SEQ ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GTAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA  
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCAACCAT GGCTGGCCCA TCTGAGAGCA  
TCTCCCCACT CTGCGCAACC TATCGGGGCA TAGCCCAGG ATGCCCCAG GCGGCCAGG TTAGATGCGT CCTTTGGCT  
TGTCAGTGAT GACATACACC TTAGCTGCT AGCTGGTGCT NNGCCTGAG GCAGGGCAGG AAAATCAGAA TAGCATTTC  
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGNGNCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTTCATGCTGT CCTTCATTG AATTTTAGAA TGATTGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG  
CTGTTTGAG AGATGAGGGC TCAAGATCTG GNTGCGATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT  
TCAGAAGAAA TGCAATTTGC ACCTGGTGGA CATATGGAAT GTCATAGAAG CATGCGGGA AAATGCTCTG AACAACTGG  
ACCCAAACAC TGAACCAAC GTGTCCCGCT TAGAGGCTGT GCTCTCCACT ATTTTTTACC CAGCTCAACA AACGGGNTGN  
CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTNCTGCT TGCAGCGTTT TGATNCCGGA  
AGGCCATGTT AAAATTTTCA GTATTGCTT GTCAAAAANG GGTTTTAGGC NCCATTTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTTTAATA AGATACCAAT GTCAAAATAC ATTTCTTTAT AAAGTTAAGC TCCCATACAG TTATAATGTT  
GTCAGTAGGA ATTGACAAT ATAATAACGT TCATGAAATC GTTACGTTGA CAGGTAGGGT TAATATGAAG CTTGGAATAT  
TTTCCAGTGT TTTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

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TTTACACGNC AGTAACCCCTT CAAGTTCCTGC CACCCCTGTGT GGGGGTAATG CCGTGCAGCT AAAAATATGG GTTTTACGNA  
ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCTGATTGGG TGAGTCTTAT TCATGTTATA AAAGGTACTC TGCITTCCTT AACATTCCAT AAATCTAAT  
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGCTTCA  
CACATAAAAC ATCATCACAC TATGCTTCTC TTTCTGTGTT TTTGTTACCA CGTATCTGTT CCATGTGTTT TNCITTTGTAT  
ATATCCTATC CTGTCAATATC TCTCCTATGG TTTTGTGGAA ACTATAAGCC TTTCTGGGGG TAAACACTTA TATCTTTGTT  
CAATGTGTAA TACATCGNAT AGCATATCAT GCCTGGGGGC ATTGGTTAAA CCCCCATTT AAATACAGCT NGGCAGCAGG  
ATTTTAGGCA TTCCGTCTATG GTGTGCCA

SEQ ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTTCACCA TGTGCGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA  
AAGGCGTGAG CACNCACTT CACACCTGGC CCTCAACCAT CTCTTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT  
TTCCCTTGAG ACTGAATGTT AAGTCAAAAA CAATAAAAAA TTGCTAATCA TTACTATGAC TCCAGAGCTA CTGTCTTCTT  
TAAATATCC TGAANTTATA AAATATAAAG CCAAGCAAT GAATTTCTAA TGGTGAATT GTAGACACTG TGGGCCCCCT  
GGCTGTGTTA TTTTCAGATG GGGCAAGGGG ATATTCCTAA CCTATTTTAA AAATCATGCC AGCCTAGATA ACTATGTGAA  
AAATATATGG GTGTCTTATG AAAACTATTA CCTAGCACCC CTTTGGCAGT TTTACATTAA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTTTAT TTCCAGGTIG GCACTGTAT AAGGCACAGG GGCAAATGCC TTTGGGGTCC TGGAACTGGA AATGGAGACA  
GGTGTGCTC AGGTGTCCCT GCCTCCACCA CCCCCTAAGT GCCTTGAGA CAGGACCACT GGTGGTGGTT CCAGCCCAGG  
GTCTGAAGG GTNCCACTGG CTCTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC  
AGGAGGGACC CTNCTCTCT AGGGGGCGAG GCCAGCTCCA AAGTGCTTNG TGGCTCCCCA GGCTTAAGGG ACCAGNCTGC  
CAGGGAGGGC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC  
TNTCGGCGGT ACTCGTCTATG TGGGTAATTT GCCAANTTC

SEQ ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCTTTTTT CACCAGGAGC TTTGGACCTG CGCAGGTTGT GGCATGTAAT  
CACCCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCIGGAAGG AATCTGTTTT CCACAATGAC  
TCCCCCAGC TAATGTACAC ACTGGCATT TGCATGCCIT CCTCACAT GGGGCACCAG CCTGCTTCA GAACCACCCA  
AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTTTAAAGA AAGAGTTAAG GANGCAGCTT ACAAAGGGAC  
AAGGCAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGTT CCATTGGCAC CATAGTGAGC CATTCAATTG  
CCCAGGGAAG NNGGTGGGGG CTAAGGGGCT AGGTTTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC  
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAAG GGAGGAGGGG  
TCCTAGAGG CTNGGTGCC ATTACATAGA CTCAATTCTG TCAATGCGCT GCTTTAG

SEQ ID NO:1753: (Length of Sequence = 402 Nucleotides)

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AAATTTAACT TCAACAAGCT GGTGATGCCC AACTACCCAT TCATCAACAT TCGGTCAAGT GGTGTGGTTC CTCAGAGTGC  
 ACCACCAGTG CCAACAGCCT CTTCCCGGTT CCAATTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG  
 GACGGTTCTC TGCTAGCTCC CTAAGTCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTCAGAG  
 CTGGAGGATG GCTCAGCTGC TGAAGTGGCG CGGGGTGTGG ATCCCGTGTG CTCCAGGAAT GCCATTGGTG GAGGAGGGAT  
 TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCTCTG TTTGCTAGGC CAGGGATGTA CCCTGACCCC ACAGTCTTTC  
 GT

SEQ ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCTT GGATTGAGC TACTGACTTA CTCTGTGAAT TTACACATAA  
 CTTCTTTTGA GCCACAGATT TAGCATTCTA CCAGTCACTT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA  
 AATCTGAATT TGGATTAGC AGAATTTTAT TTTTCCATT TCTATTTTCT ATGGTCACTA AATTGAAATT ACAACCATG  
 TAAATTTGA TATCATTAAT TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAATTA ATTGTNATTT  
 TCACTGATGA GACTGAAATA CAATCAGTCT GTATTGTGTG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEQ ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TTTTGCTTTT TGCAGTGTCT GTCCTCTTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG  
 AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTACG GGTGCGTGA GGAGAGGCCT GGGCTCTCT  
 ACTGGATCTA CACTCTGTCC CAGGTTTITA GATCCCACTG AGCCCACTG ACTGAAAACA AGGACAGTCA GGGTGAACT  
 TCTTTTGCCA GAAGTGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGCAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC  
 TCAATCTAG CTCTGACTTA GGTCAAGGGG CCT

SEQ ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC  
 CCCTTCCTAG CCCCTGTTC CTCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT  
 TTGAATAAAA CACAAGCCTC CGTT

SEQ ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANACCAC ACCTGAGCTA ACTTCTGGC TTTTCAATCA AACCATCTTT GTCACTTCCT GTCCCCACCT  
 GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTATTGCCNC AGCTGGAGTG TGGTGGCACA ATNTCAGCTC ACTGCAACCT  
 CTGCTCTCTG GGTTCAGGCG ATTCTCCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC  
 TACTTTTTCG TATTTTTAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCTGA CCTCGTGATC  
 CACCTGCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTTATTG  
 GGCTATTCTT TATTGAGATC TAGGG

SEQ ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCATCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG  
 GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCAC CCAATGTGTT  
 TTTTGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCTGCC CATATCATAC AACCCACCA GGAGCAGGGC  
 AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CCTGTGAAGA ACTGTGCTG TTTCTCAGG  
 GAGAGGCCTG AGCCCTCTCA GAAGCAGGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGGG  
 GAGCAGT

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SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATATTTTT TTGTTAAAT TTCITTTGAT TTTTTCCTG CAAGACTTGG TGTTGGCGGC ACTGTTGTAG TTTAACTTCA  
ATCCCAAATT CCATGAAATA GAAATCAGAA GTAAAGGTG AGAGGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA  
GAGTTTGAAT AGAAAAAAG AAGAGGGTAT GTGTGGTGGG CATTCCTGGG CAAGGCCATT CCTTGAGGGA GGGGGTTGGC  
AGGCAGCTTG CCTCTGCCTC ATGCAGGGGA GGGAGGAAAG ATCCCCCTGG GACCCCTGCAG TCCCCTCTTC CTAGGGCTTC  
CTGCTCCAG GGGAAAACT AATACCAGAG AGGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CTGGCCGGGT CCAAGCTGGC CAAGAAGAGG GAGGAGGCCA TTGAGAAGGC CAAGCGGAG GCTGAGCAGA  
AAGCCCGAGA GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGGGAGG AGAGCAAGAG CGAGAGCTTG AGGCAGAGCG  
GGCGGCTAAG GCGTCCAGCT CAGCGCATGA AGGTGCGCTC ANTGACCCAC AGCTCAGTGG TCGTGGCCAC ATGCGGCCAT  
CCTTCGAGCC ACCACCAACC ACCATTGCTG CTGTGCCCC CTACATGGG CCGACACAC CTGCCCTTCG GACTCTGAGC  
GAGTACGCCC GGCCCCACGT CATGTCGCCC ACCAACCGNA ACCAACCTT CTACATGCCC TTAACCCAG GACCC

SEQ ID NO:1761: (Length of Sequence = 378 Nucleotides)

CCCACCAGAG CATTTCAACA AGGCTTACCA CACAGGCCCC AGTACCTTTC TACTCTACAA TGAGGCTCAG AAGCTCAGTG  
TACCACCCCA TCCCAGGAG GCCACTTAG ACCAGAAATC CCAAGTCCAT TAGCTACAGG CTGATATTCA GGGACATCGG  
TGTAACAAA GAAGTGGGAT ATGAACTATA TCCCTGATTT TTTTTCCTT TTTTTCCTT TTTTTCCTT TTTTTCCTT  
TCTTGTCCTT CAGGCTGGAG TGCAATGGG CGATCTTGGC TCACTGCAAC CTCGACTCT CAGGTTCAAG AGATTCTCTT  
GCCTCAGCCT CCTAAGTGG GTAACAGACA CTGCTACCA TGCCCGGCTC ATTTTTTT

SEQ ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGTTCAA AAAAATCTTT TAATAGAAGC TATAAAATAG CAGATAAGCT AAGTCATTCT CATAAACAC  
CATTTGICAT TTGAATGCGT GCATTGTGGC CTGTTACTTT TAACTAGTCT CACTAATTTA TAGTTATATA TGATGTAGAT  
CTAGATTGTG ATGTACACTA AGTGGGTTGA TCCYGAGATC AAGCTATGAT TGCTGCTTGC GTAAAGTGT CCYTTTGGGA  
AATAAATAAT CTTTCATATC TGTAACCTTT GGTATAATTG GTATTATTG CAATGTATTG TTGTGGTTGT CAACTCAAGA  
TTGTATCTC ATCTGGGGAC ATTATGAATC T

SEQ ID NO:1763: (Length of Sequence = 157 Nucleotides)

GTGTWTACTT AGTGTGTAAA GTGAACAAGA AAAGCAGCAT AATAAAGGAG CTGTGTTTT ATCAGAGGAG CCTTCCTTCT  
GAGTTTTTAC ATAAGTTGAT GCCTTCACTG CAACTTTGAA TACAGTGCTT TGAATGTGA AACACTTGAA TAAAATG

SEQ ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCTGC CTCAACTCC TCCAGCTTCT NACCACTTGG CAACGCACCA CTGCCAGTTC CTCTGGGGCT CTCAGAAATCA  
CTGGAGTACT TCTGCAGCTC TCTTGGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTC  
TTTATTTCTT CCCTTCCTC TCCTTGGTGT ATTINTCCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA  
TTTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCCTG ATACAGAGTT GCCTGCAGG GAGCAGCTTT  
T

SEQ ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCACGCGTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACCT GAGGTITGGGA GTTGGGGACC AGCCTGCCCA  
GCGCGGAGAA AACCGTCTC TACAAAAAAT TTTAAACTT AGCCAGGCGT GGTGGCGCAT GCTGCAGTTC CAGCTACTCG

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GGAGGCCAAG GCTGCACTGG GCTGTGATTG TNCCTACTGCA CTCCAGCCCA AGTGACAGAG CAAGACTCTA TCTCAAAAAT  
 CAAACAACAA CAACAACAAA ACACCACATA CACACACACA ATGAGGGTAA ACAAATAAG TATGTGTGGG TCACACTTCA  
 GCAGGGGTG CTGGTTTGGC AGAGGAAAGT GCAATTATTT TATCTATGGG TGTTTATTGT CTCCACTCTA AACTGTCAGT  
 TACAGATGGC AAGACTGTTT

SEQ ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAATACT AAGACACTAA ATGCGTATTT TAAATTTGCC CATTAAGTTT TGGGCTGCGT AAGAAATTAG TAAAAAATAT  
 TTCCAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA  
 GCTGGATTTC GTGTATCTG AATGGCTCAG ATTATGTTCC TTCAAAAAA GTTATTTTAT GTACGATCAT TTTTATATG  
 ANGCAATGA AAAATCACC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA  
 CCATGTTATT CTTTTATGC AACAGAATGC AGTGTGTGA GAAGTACATC AAG

SEQ ID NO:1767: (Length of Sequence = 330 Nucleotides)

GGTGACAGTG GCGGCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCGT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG  
 GTGCATGAGC AGACCTCGTA ACCGTCTCTC GAGCGGCTCT GGTCTATGTTG TCCTGGAGGG GCGCGGGGCC CCTCTGCCGC  
 GTCCACGCCC GCAGCCACAG ATCCATCGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GCGCGTGGAC TGTGGGTACC  
 CGGGTGCCAC CTCCAGCTCG CCATCCAGCA CTTTCCAGTA CTCTGGCCA CGGAAGAAGT AGGAGGCACC GINGGACCAG  
 CGCATGGCGT

SEQ ID NO:1768: (Length of Sequence = 361 Nucleotides)

AACTGGAAAA CCAAGACTGG TAGACTCTCT TTTCTTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGGA  
 ACACCTATCT TTTCTTCGGA GGACACTAAG TTCTATTGTA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA  
 AGGAGTCGCT ACCGTGATTT GGTGACAGTT CTTCAAAACG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCCTGAAC  
 TTTTGGGTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCTG GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG  
 GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEQ ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACCGC AGCGCCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGGT TTTCTTATGA CACTTTGTG GATTATGATG  
 TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATCGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT  
 CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA  
 TGAGCCATGG CATTGGGACA GGGTCACTTC TGACAGGGGA AGTGGGTCCC CAGTTCAGCC CTTCTCTTCC CTTTGGGCTC  
 TTGCCAAAGN TGTCTTCCCC TACTGTTAAN CTTGTTTGTG ACACGGTGA GTTCGTATTG GGTCTCTGG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCAGTTTAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCCTTC CCTTTGTGCC CAGCCTCAAC  
 TGACTCTGGC TGTGGGAGGT GTGGAGGGTC CTTAGGCTTC CCTCCCCAAC CTGGCCTCCA CCAACACCCC TAACAGGAGG  
 CCGGTGGAAG GCTCAGCCTC TCCTCCGCAT CCTCTCTCT TCCTGCCTAT CGGAGGGAGC CAGGGTCCCC TAGGCTGACC  
 CTGAATCCTC TTCTCCCTT CATGGGAGGG GGGCAGGAAT CCAGAGGAGG ATGAAGCCAG CGGGACCACA TGGCTTNGTG  
 GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCGNC GGCTTCAGAG GATTGCAACC CTGTTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)



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CAGAAAAGGC AAAGTTTATT CCAGTGTGTA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTATCTCTCT  
 TCACCTAAGA GGTAAGANCC GGCTGTAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTCACGG  
 CTCAGGCCTT CTCAGACTTT CCCTGGGACA CACGGCTCTC TGGGGGGGCC CGGCGAAACC ACTCGGACCA GGAGCCATCG  
 TACACGGCCA CATCAGGCTT NCCGAGAGG TAGGCAGCCA AGGNCACGTG GCAGGCGGTG ACTCCCTTGC GGCAGGTGGC  
 AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGCTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTGTGCCCCG TTCTGCAGGA GGGAGACTGA  
 GGCTCGGAGG TTCAGGGCCT GCTTGGCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTTCCCTCC  
 CACTCCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTNGGGAGCA AGGAGGGCTC  
 AAAGAGATGG AGATAGGCT GTTGTGAGGC CAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCAA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATT  
 TCTAAGAAAT ATAGAGTGAA TTTTGCCCAA AGGCCCTCAC TGAACATAAT CCTGAACCAA AAGAGTATTT CTTAATCCAA  
 AACCTTACAG TATTAGACCT ACGAATTCTG ATGATGCCCTG ATCAGATGCT AGTTGTTCTC GACAATCCAT GCAGTTTTCC  
 AGTATGAAGG AAAGTAACAA ATATACCATG GTTATTCTTA TTTCTTTCTG AAAAATATCT AGGATATTTT ATAGTGTAT  
 GTGGTAAAT ATTCAATTGA CANTCACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTTGTATTAT CCGTTAATC  
 C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCGTGTAATA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAATAAG CTATACTTTG CCAAATAA GTTTCAGCTG  
 AAGGTAATGC TAGTTATAA TTAAATACAA TTCTATTAAG NNCTTGCAAA AGTCAAAGGA AGACGGNAAA CTCCTCTTT  
 TGGCAATTCA AAGGCAAGA CCGTTTCATT TATTCTTAAT TTTCCTTTAT ACAATCATT TCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTTCAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAAGC AATGGCAACA AAAGCCGAAA TTGACAAATG  
 GGATCTAATT CAACTAAAGA GCTTCTGCAC ATTAAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAAATCTAC  
 CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTTAAAGACT TTTTCGGCA TCTTGAAAAA AACCACCAIT  
 ATTTGACATA GGTAAACTG AAAAAACAAA CTATTCATAA TTACAATTG TGACACATTA TGTAGTAGCT AGGTTTCATCA  
 CATAAATTAC ATGNTACCCC AGTTCAAGTT AAATTCAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA  
 ACTCCCCCA AAATTTTTAA TTTGGTTTGC ATTCTTTGA TTATGTTTGN GGTGATTGA GACTTGAGGC TGGCACTGGA  
 GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTGCTGGG GAGTGACCAA GTGCATCAGG GGGTGAGAT GCCCTATTCT  
 GGCTCTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCCTGGNGAG  
 ATAGATGTCA CTGGAATGNN CTTTNTCCAA GTGAAAGGCC ATCTTGTGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCACAGC TGCAGGCATC  
 AGCGGAAAC TCCAGGCTGC TCATGGTCAC TGGCGGTGCT GAACTGTCTC TCCACTTTNT TTTGGTCTT GATCTTGAGT

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CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACGG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT  
GCACCACTCG GTGTGACCGG TGCCGCCGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTGCTCTG  
CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEQ ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCAACT AGAAGAATAC AATTAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAAATTA AAATTCACCT  
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG  
GAACATACAG ATTCACTGGT GAAAGTAAAT GTACACACAA CCTTTCAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT  
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

SEQ ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTTWTAT TGTCTATAG ACACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT  
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATT CCGTAAGCTG AGGGGGATGG AATTTAGAAA  
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG  
NGGAAAGCAA TGAGCTCCAC CCTAYTCAGC AGA

SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA  
TCTGTTCAAC TGTTGGTTTG ACCGGCAAGC CATTGGTTGG AACATCAACA TCCCTGCATT GCTACAAGAA AAATAAGGAC  
ACCGGCAGCC CTTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TGCGTATTAA TCAGCCATTT  
TTGTGAGAGT TTGACCCCTG AAAGGGTGCT TTGTATATGT TCTTTTCA TAATGCCCAG CTGTCATGAA ATGTACAGAG  
AAATGTGTGG TCGTATTTTT TACTTTTGTC TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAAGCTC  
ACCTCCCATG TAGCACATGA AATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCTCAGATT GTGAAGGGCT CTGTAGGCTA TGTTAAGGAC ACTAGAAATC TATTGAAAGG TTTTAAGCAG AGAATTGACT  
TGCTCATATT TTTCCTTCAA AAAGCTCAAT AGCTACAAA CCGTCAATAG ATGGTAGCTT TGTGGGGCTG GGGTGAATGC  
AATGATATTG CAAAACAAGA TATAGGGAGA CAAGAACTTT TAATAACCTA AACCAGTGGT TCTCAAACIT TCCATGCAATC  
AGAATCACCT GGATGACTTG CGAAAACACA AATAATCAGA CTTAATCCCT ACATTTCTG ATTTAGCAGG TATAGAATGA  
GGTTTAAGAA TTTCTAACAA GTTCCAGAT GCGTAAGGT GTCTCTCAGG GTTTTACTT GAGCAACTGG GTGGATCCNG  
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCGGTC AGATTGTTT

SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAAGAGGG ACTGTCCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCTTCTCCT  
GCTGCACACC CAGCAGCCAT CTATGGCTGG ATTTGGAGAA TTTCTGGTCA AACCGGTGAG TATGAGGAGA GCAGGGCAGT  
TGGGGAGAGA GGTCCAGGCC CAATTCTGCC CAGAGAAGCT CCCAAAGAG AGGGAGTGT CCTGATGAAG AGCCCATGAA  
AGGGGTGAGA CCCAGGAGGC TGTGGAGATT GCTGCGGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG  
GGGTCCCTT AGTCTCACTG AAGTTCTTGT AACTINGGAT TGGGGCCAGG TCANCTCCT CTGATACCCG AGCTACAMAT  
CTGGCTTCCC AMTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)

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AGAGCTTAGC ATGCTGTTGG TTCATGTTTT TATGTGTTTA TTTCACATTG ACTTTTGCCG TGAGCTTTGA GGGAGACAAC  
 ACCATCACAT ATGTGTAAAT TGTAAAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCATT TCTTACTGGC CATGATGAAG  
 AAAGCTGTAT CGTAGGAAAA TTACTAGGTA ATTTTACTCA CTTGATAAAG TTAATTTGCA AGGTATCAIT CGATTGGTAG  
 AGTTACCAA ATGAGAGTTA AAGAAACAGA AATATGGTTT CAGTTTATGG TGCATTCTTA TCTTTTTCAC TGAGTCTATT  
 TCTGTCTGGT TGCTTCACIT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA  
 TGGGGTGATT TAAGTAGGAG CCNGGGT

SEQ ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAA AAAGTAGATT ACCAAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT  
 CACCCAGAAA AAAATAAGAA AGATAAAGA TGTGGTAAA ATAACATAAG AATAAAAATA TAGGGGAAAA GGTAGCCAAG  
 GGATAGATAT TGATATTCAT TTCTTTTTTA CAACTTTTAT AAGTGTGAAT TTGTGTGCAA CAGATTGCAT ATATTGTGAG  
 TATATAACIT GACTAATTTT GACAAATATA TACACCCATG AAACCTACCAG TTATAATTTT AAACATTTTC ATGGCCCTCC  
 AAAGTTTCCT TGTCCTCTT TGCAATACAC GCAACACAC ACACCCACA CACAGTATGT AGGGCAACCA TTGATCTGCC  
 TTCGTGTACA ATAGGGTAGG TTGCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GTAACAGAT TACATTTGAA CACCTAAATA AGTATTGTIT TCATAATCAT TACATGCTTG TTTATGATT ACAAAGATT  
 GGTAGAGAAA AGTACAGTCC TTAAGGCATA TATATGCCAA TGCATTAAAC TACTCAGCTT TTGTGCCAGC TCAGGTGTTC  
 ATAGGAACAG GAATGTGGAA TACCAGCTTT TTACTTTAAT TATACTTTTA TGCTGAATTT TTCTTCCAGT TAAACCTTTA  
 ATTACACTAG TATGTAAAGT AGTTACTGAG AAAAATAAGT TTTTGATTTC CCTCTGTG GATCTGTAAC ATTTTAAAT  
 GGAGCTATTT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TTTAATTTTA NGAAACACAA ACCTGGGTCA  
 CAAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GTTATTCCAA CCAAAATTC CTAAGATTGA AATGCAGAAA CTTACAGAAT TGAGTAAAA GACAAAAACG TAAATACTAA  
 ATATTGAAAA GATGCAAGIN CTCCCCAAT AACTCATAG ATTAAATAAA ATTCAAATTT AAAGGCAATT AATTAGGGAT  
 GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGTC TGGAAAAATC AATGGGTGAA ACGAAAATAT TTTAGGATAA  
 GATTAATGAG AAGTAAATTT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN  
 ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTTN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAG

SEQ ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCCACAATT GACAATATAT ATGCATGTTT TTAAACCAA TCCAGAAAGC TTAAACAATA GAGCTGCATA ATAGTATTTA  
 TTAAAGAATC ACAACTGTAA ACATGAGAAT AACTTAAGGN TTCTAGTTTA GTTTTGTGTA ATGCAAAAT ATATTTTINC  
 TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTTAAGC ACTCACGCAA AGGTAAATGC  
 ACACGTTTTA AATGTGTGTG TTGCTAATTT TTTCATAAG ANTGTAAAC ATTGAAGTGA ACAAATTACC TATAATGGAT  
 TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTTTTATA TAATATCCAG ANGGCTATCA  
 CACTTGIG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

CAACTTGGA CAAACTTTTA TTTTGAATGC TGGTCTGATC AGTCCACGGC CAGGGGTAGG TGGTAACTAG AAACAGCTGG  
 AAGGAGGGAA GGAGAGGGGA CCAGCAGTCC GCAAGCAGGA GGAAGGAAA GGGTTGGGGA CAGGAGGAGG CAAGGCTGAG  
 GAAGGACCCA GCCAGCTGGG TGTCTGCCCC GGCTAGAGAA CGAACCACCC CCACCCACCA GGCTACCCTC CATCTGTGGC

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TTCAGTGCAG AAGTCAGTCC AGGTGGGTTC AGGCCCATGC CACCTTCTCT GGCCTGCACA GTCCACCCC AGGCAAGGGG  
TTCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCTNGG AAGTGTCCCT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTG AGGAGGCCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT  
ATATTTCAAT CATTTATATT ATTTTTTAA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC  
TCTAGATTAA GCAACAAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT  
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGTTTCCYTC ATTAGCTGTA GACTATCCCC TCTCCTCCCA CCACAWTGT TCIWTGATGA KTTACAAACA GAAAGGAAAT  
CACATTTTCA TACTAAAAAC AAAATGWTCA GAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT  
GCAACACCTT AAWTCACAGA CTGAGACCTC ACATTYTGAC CTGGAGNTTC CTCCCCTTCC CCAGCCTTGG GCTAGCTTTG  
GCCTAGGCTC AKGTAATACT GACACCCACA GGCCTGTCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAAGCA GAAAGGTGTG TTTGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC  
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTPTTCCA ATGGAAAAYT  
CACGGCCAG TCCACAGGA ACTTTGCGSC ATACCAAACA ACAWTGAGGA AGGAAGGGCC GGGTGGCTCT ACCAAACAKT  
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTTT ATCGGCTGTA TAAACATCTC TGGTCTGTAC ATACATTTCA TACATCGTAG GGTGGGAAGC GAGGGCCAAA  
GGGAGGCCCA GCAGCACAAC AGCTCACCCG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AACCAAGGCC AACAGCTCCT  
GCTGCCTCTT CCTCCCTGGA AAAGTCACTG TTATGGGGAG GGGGCCAGGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT  
GGTGGGGAGG CCACATNTAA GTCTAGATT CAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT  
GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTCTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA  
GGCAGCCCTT CGGGTGAGGG CTTGGGCCTC GAGGGATGGC AGCCACCACT GCCTAGGCAA ACGCACCTGG GGCTGAACTT  
GGCGCCCGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGGT GACCTGGGTC  
AGAAGGACCT TTCAGAATGA NTTGTTCCCG TCAGCAGATA CCGTCAAGAC ACGGCTGGCT CTGAGAGGGG CTGGGTGCCC  
GTTTTCCTG TATCTCCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGGTCCCG GGTCA

SEQ ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAACATGC AAATGGGGC GGGCACAGTG GCTCATGCCT GTAATCCCAG CACTTTGGGA GGCCGAAGTG  
GGTGGGTAC CTGAGGTCAG GAGTTCAAGA CCAGCCTGGC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAAT  
TGGCCAGGCG TGGTGGCATG TGCTGTAAAT TCCAGCTACT CGGGAGGTTG AGGCGGGAGA GTTGTTTGAA CCCGGGAGGT  
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACCCAG CCTGGGGTGA CAGAGCGAGA CTCTGTCT

SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

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GAAACGCTAA GGTTTTGACA GCGTTACAGT GAATTCTCCG GCTGTAGAGA TTGGAGGAAG TOGGGAGAAA TTCGTCTCTA  
 AGTTGTAAGG TGAACACGCA TTCATTTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAACCTCAGT AAAAAGATTG  
 GGCCTTTTTT TTTTAATCTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACTC TCTACCCAC  
 CCTCCAACAA AATAACCTAT CGGNTCTCAG AAAATAATAA CCTTTTGCCCT GCCTTTGAAA TAGTTATCCT TTTAGTATG  
 ACAGTGTTC AAAATCTTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTTGTTC  
 TAAGACGAGG GGGACTCC

SEQ ID NO:1796: (Length of Sequence = 416 Nucleotides)

CITTATTACA TATGCAACCT TGCCATGCCT GCCAGTTAAC TCCCCTCCCG CCAATGTAT CCTCATGATA TCAGCTCCCT  
 CTTGGGGCCA CTGAGCTGCC CCCCTTTCCT TCTGGGCTGG AGTAGTGGTG CCCCTCAAGC AGGCAATGGG CAGGGGGAGA  
 TCCACAATTA ATCGTGCAG TTCTCTTAAA AGTATTAAAC CTTAAATAAG CACTCTTGGG GAGTTGCAA GGATATTGAG  
 GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCCTCAG  
 AAGGTGAAGA GGGACCCAT TCTGGGGCTT AGTGTGGGTG GGCATATCC TCCCCAACT TGTCTGTGG GCGATGTCT  
 TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGAATCAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTGATC  
 CAATCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAATA ATGATAGTNT CAGGGGGTCC ATGTAGCAAT  
 CCAAGCAATT CCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAAA GAATGTGCTC CTAGTAAGAA  
 GCAACTCTNT TCCACTCACT TCCTTTTGCT CTNTGGCAGG CAAGTCAACT GGGTTCTC

SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGGTCCATT TTTACAACAN ATACATCCAA AACACTATAT AATANNITTT TTTACAACAT TTCCAAATGA GAAGATTGCT  
 TTINCCCCCA CTACTGCTAT TCACACACAG TACTTCCAGC GCACAATACA TTAGGAGATC TAAAANTGCT CACCTGTGAC  
 TCTAGGCTGC TTAGGAAATG TGAAAACCTAG NAACATTAT AATGGCATT GCTCCTTTCA ATACAAGGCA ACATTTTAGN  
 AACCT

SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGTTAG GCTAGTTAGA AGGACACGGC AATAGCCTTG AGATTYTCAA CCAGGGTAGT GTATTAGAWG TAAAAAGGAG  
 AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTTGG ACTGATTGA CTGCTCTTTC ACTCATTTT  
 TTATTCACCT AACAACTATT TTTGAKTNT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA  
 GAAGACTCTG AAGATGAATT CCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGGG CTGAAGTGAC AC

SEQ ID NO:1800: (Length of Sequence = 309 Nucleotides)

GGCATGTGAC ACTAGGCCAC AAGCGATAAG CACAGGCACC TGACTTTTAA GTTTTGTGTT GTTTGTGTT TCCCAAAGTG  
 CTGATAACAA TAACAACAC AATAGGATTC CAACCAGGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGTGGGGGCC  
 ACCACAATGC CAAATCGTTT CTAAGGAAG CTGAAAAATG GGACTGTCTT TTGCCACTT CGTTGTGTTA AAAGGGGACA  
 TTTGTCNAAA CTNCCAACC GAGTCTAGA AGNTCTGAC AAGGAGGCAG CATCCAGCCT TGACCAGGC

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SEQ ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANTTAC TCTGCAAAAT TAATATATGA TTTACCTGCT GTINTCATAA GATTTCCTAAA TAGACAAACT CGGTATGCTT  
NCGATTGCT TTACATTCTA AGTGGATTG GAGGTCAGG CAGGCGCCAA GGAGTACCC GAAGTTTCAT CANGCGGAGA  
TGTTGG

SEQ ID NO:1802: (Length of Sequence = 281 Nucleotides)

GGTGGATGTC TTTGGGCGCA GGATGGAGCC CAGACCCAGT GGTACAGTG TGGAGCTCTC TCCTGTCCC CTGACTCTGG  
CCAAGGAAGT GAATGCAAAG CAGCAGGAG GAGGCAGGT GGGGACGGCC CTCTGAGCTC TCCGCGATGG CTGGCGTGAG  
GTGCTCTAA GACTCTGNGG CAGCCCTGCC TTCCCTACTC AGTCTTCCCG ATCTINTGTC CACCTTCTG TGTGGGCCAG  
NCTCCCGCA GGTACTCAGA GGCCGCTCAG AGGGCAGGT T

SEQ ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTACAGTTA TAGTTGGGA CATTAAACAC CTTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGGATATA  
CAAGAACTGT ACAACACTGG CCGGTGTGG TGNTCATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CCGGTGNTC  
ACTTGAGGTC AGGAGTTCCA GACCAGCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAAA AAATTAGGCT  
GGCTGTGGTT GGCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTGA  
GACCAGCTG AAAAAATGG TGGAACCCA TCTCTACTAA AAATACAAAA ATTAGCTGGG TGTTGTGCGT CTGAAAAAT  
TAGGTAACT CCGTCTCAA AAATAATAA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCTGAAGC TCAAAGTCTC TCTCTTACA CAACCAGCGN CAACAGGGCC AAGCTACTGG CTAAGAACAG ACAAACTTTC  
CTGCTTACA CCACAAGCT GACCCGINTT GCCAGACGA TGTGCAGGN CTNTTACAG CCAAGGAGGG CCGCCGACG  
GNTTATGCT CCTATCAAT CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNTTCTTAA GNGCNCAG ACTCCATTA  
AGATTACCC TCCTGGTGG GCTGNCCTG GGAATAT

SEQ ID NO:1805: (Length of Sequence = 349 Nucleotides)

GCATCCATGG CCGAGGGCGG CAGCAGACG GCGGGGCGG GCGGGCTCC GCAGGTCGTA ATCTGAAGGA GTGGCTGAGG  
GAGCAATTTT NTGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTGCGGG ACCTCCAGAC  
CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCT  
GCACACCGTT NCGAATCGG GCCACTGCAG GCCATGGGAG CTGNTGGAC TTCCTCATCC GGAAGGGGGC CGAGGTGGAT  
CTNGTGGAG TAAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GTGCACTGTG GCCAGATCTT TTCTAGTAAA ATGTGTGTTA CTGATGGCA GACAGCTCTC ATTCAAGCAG TGACAGATGT  
AAGCCTTCC CATTTTGTG GCGCATGTG ATTCAGCGT TGGCTTCAA GTGCTTGGG ATCATCTCCA CCCAGACTAA  
GGAAGAGGAA AGAGCTTGA CAACCTGCACT TGGCTGTTT TNATGGATCA GGCAAGGAAT TGGCTCCAAC ACATTAGCTC  
ACATTCCATT GGTAGAACT GGGTTTCTCA ACTATTAGTA CAGGGTGAGT GTAGGGTTT GGCACCATGG GCATTTGAGC  
TGGCCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CTGTGAATGG TGTATTATGT TGTGAGGAGC TGTCTGTGC  
ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

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GTCTCAGCT TCACTCTGGC ACCACTGTGA GCACCGGGAA ACCTACCAGA AGTTGCTGGA GGACATCGCT GTCTGCACC  
 GCCTGGCTGC CCGCTCTCC AGCCGAGCTG AGGTGGTAGG CGCGTCCG CAGGAAAAGC GCATGTCGAA AGCAACGGAA  
 GTGATGATGC AGTATGTGGA GAATCTAAAG AGGACGTATG AGAAGGACCA TGCGGAGTCA TGGAGTTTAA AAAGCTTGCA  
 AATCAGAATT CAAGCCGAG CTGTGGCCCC TCTGATGGGG TCCCTGCGAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA  
 GAATATGCCT CGCCGGAGGG TCAGCGTTGC TGTGGTTCCT AAGTTTAATG CCCTGAATCT GCCTGGGCAA ACTNCCAGCT  
 CATCATCCAT TCCTCCTTAC CAGCTT

SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGTACTTTTC CATTTAGATT CAAATGGAGC TAAATTAAG AGTTTATGA GCTGTAAAGA ATGAGGTAGT TTCTCCTAGG  
 ACCCCCCAAA GACAGTGCAA GTAATGACCG TTTGNTCTC ATTCGTCGAT CTTTGATAGT ATGINCTGGA GTCTACTCCC  
 CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTGTGCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGGNCT  
 GTACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCCAGTTAA GGCCAGACCA GGCTGAGTGT  
 GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT  
 GGGTACCTCT CTTATGCGAA CCAGAGACAT T

SEQ ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAAG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG  
 ATCCGGCCCC GGCCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG  
 AGCGGAAGGG CACCTCAAC CGGACCTGC TCTTCGACCC GCTGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC  
 TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCCGGATCAT CAGCAAAGGC  
 ACCAAGGACT CTCGCTCTGT NTGCTTCAAC CTGGGCTGCC AAGAACAGCT TMTTACAACA ACAAGTGCCT GGTGCACATC  
 G

SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTGAAGG ATTAGAGAAA  
 GCTTCCAGAG GGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAG GCATTTAGAC AGAGGAGACA ATTTGTCTCG  
 ACCCAGAAGC ATTGGGGTAT GCTATGCATG GATAGNCAAA GAATTTTTC AAAAGGGGGG CCAGCAAGGC ATT

SEQ ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAAGA GTTGAATAT GTACATTGAA AAAAGGAAAG ACATTTTTC ATACCAACCT TTCCCTAGTT CGCAGTTTCT  
 GAATAGTAGA AACAAACAC ATTTTAAAT CTTCTATCA ATTTAATTTA GGACGAAGTA ACACAACCTT TATAATTAAC  
 CACTGAAGTT GTCTTTAAGG ACAAACCTTA AATTTTAAA TGGGTGTAC CATATTINAT GAGTGGACTG ACTCCAAGGT  
 TGCCTTGCTC CAAGNIGGG CATCGTGACA TTGCCGTGAT GCCCAGAAGA AAGTTAATGG CAATGATGTC CAGTCAGAGG  
 GCAGACATGC TACACATCAC AATGATGAGA GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAAT TATTATTTTC  
 CATTCAAAC AACTGGGAGT GAG

SEQ ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAAA GTGTATTTGG CTGTTCTGAA GCAGGCCATC  
 ATCACCCTTC ACCTCACCCA CAGGTGGCTC TCGGGGCTG GTCCATGGGC GGCTGTGGCG TNAGGATGGA GTCCTAGCTG  
 TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG  
 CCTGGGCTT CAAGAACCTC CCATCTATCC CCATTCCTGA GACAGGAGTT ACAGTCCCTT TTGGNCTNA CATCCAATAA

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AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCCC TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

CATCAGCGAC AGGTCTCCCT CCCAGAACCC CATCAGGACA GGAGAAAAGG CAGCAAGAGA GGTGGGGTGG TCCTGGCACC  
TGGGCCACCA GTNTTCTGAA TGAAGAGTGA GTCCCGGGTC AGGAGTCCAC ATCAGGIGTG GGCTGCTTCC AATCTGTAGG  
TTCTCCTGGA GATTNTCACA ATCTGCCAGC TCTCTGGGAA TCACAGAACC ATCATGTCCC CTTAGGATGG CAGAAGATGT  
GGCACAGCCT CAATCTCCAA CACTGAAACA CTNAGAGAGC TTGATACGTT CCTTAGGCAG GGCAGAAACA TCACAGCACT  
TCACGNTAGG AACCACGAAA GAGT

SEQ ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCTGCCCC CTGAAGGAGA CTGCATTGGA ATTTTGTCCA GGTGGCCCTG ACACATAGGA ATGCCCAACT  
ACTGTGACTA CCCTCTGAGA TAAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCAATTTG GAGGTCATGC  
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCCGGTG CCGTAAAGAA ATAGTACTTG AACTTAAATT TATTTCAGCA  
GGCCATTTTT ATTTTCTGCA GAAAGGGTAC ACTTGGCAGC AGTTTINCCA CGAGAGTACC CCGAACAAAG GAGACAGGGT  
CATTTATAAC CTGACGCGTC CACCCCTCTG CTGTGTCCGG TTTCCATTGG CTGGAACAGG ACCTCACATT CTGTATTTGT  
CCCGATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEQ ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTNACAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGAACAACAG  
AAGGAAATC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAANG GGACCAAAAA AGTACCAAAA  
ATTTCAAAAT TTGTATAAAC TGTACCAAT CTGGNTACGA AGCGTTATTT TTGCCACAG GGCATTCCC TGGAAAGNCG  
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCAGTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGTC CCAGGTATGC TCCCACCTCC ACCTGCCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCACCC  
TGGTCCCTTC CCATCGCCCA CAAAAGGGGG GGCACGAGGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGGG TGAGGGTGGG  
CGACCCAGGA TTCCCCCTCC CCTTCCCAA TAAAGATGAG GGTACTAAAG TTGTCTTGGT TTTTATTTTA TTATTATTTT  
TTTCTTTTTC CAGTATACTA GCTTGTCTTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGTGGG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAAGG AGAGGGACTA TTGCATAGCA  
GATGCAAATG AAGGGACTGT CTTATTATAC AGTTTATCA TCTGTTAATA CTCATAATCT TGTTTCTTTT TCAACTTTTA  
TATAATTTTA TCTTTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGTC ATAGGTTACT TTTATATATT  
ATTGAATTTA TAATAACAT GTTCTTTTNC TGGAAACTGG GATGGNACCN CGATGGTGTT TCTTGAATAT AAGAGTGTC

SEQ ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC  
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TTNCCAAACA GGCTTTACTA AACCCCTGA  
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT  
TAGAGTCCCA AATCTGCCAC TTTCAATCTG TATGGCTCA GGCAAGTTAC TTAANCTTTC TGTCTCTCTG TTTTCTTTAT  
AAAATGGGGG ATAATAATAG TAACCTCTTC ATAGGG



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SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCTCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCTCTCA CCAGTGTCTT GGGTATCCTA GCTAGCAGCA  
 CTGTCTCTTT CATGCTTTTIN AGACCTCTCT TCCGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCGGCACA GCTGGCTGTG  
 GGCAGTGCC TCTTCAGCAT TGTGGTGCC GTTTTGGCCC CAGGGCTAGG TAGCACTCGC AGCTCTGCCC TGTGTAGCCT  
 GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG  
 GGTCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATGCT CTGCACTCGC NCTGGTACCA GGCCCGCGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG  
 CAGACCCGCC AGTGCAGATC CTTTACAACC GCACCATGGT GCAGCTGGGC ATCTGTGCCT TCCGCCAAGG CCTGACCAAG  
 GACGCACACA ACGCCCTGCT GGACATCCAG TCGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGCTGCGCAG  
 CTTGCAGGAG CGCAACCAAG AGCAGGAGAA GGTGGAGCGG CGCGTCAAG TCCCCITCCA ACTGCACATC AACCTNGAGC  
 TGCTTGGAGT TTGTTTAN C TGGTGTCTGC CATGTTCTT

SEQ ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GTACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA  
 ATAGAACCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCCTT TCAAGAAAG CTTGAAATG  
 AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTC TGTGGCG

SEQ ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINTTG AGCCAGAGTT TAAGCCTGAC ACACAGGCTT TGTCTCTCAC TGAGCTGTCT CCAAGACTGG AACTACTTAG  
 TGACTCGGCA AATTTCTG CCCCCACCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTTCAT GAATGTTGGA  
 ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTGGGGAA GGCCTTGGG ATTTTCTGTG TCTTGCAATC ACAGAGGGAG  
 GCCATTTAG ATTCAAGAGC ATTKGATTAG GGGATCGTGA GGCAGGGATG CTACTGCGKA TTTCTCTCTT CAGG

SEQ ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTTTG TCTTACTTAC ATCTTAAAGA ATTAGAATT GGGTGGTGT AAGTGACTTA CTTCCAGGNN ATCATGCTCT  
 ATTCTIACCA GCAGGTCATA CCNNAATGTC AACTATCTA TTGTTAACCA TGAATGNTAT TCAGATCTAT TACTTTTCTG  
 GAAAAGTGG AATGTTACT TCCAACCATG GCCTGTACC GTGAGTGTGA TCANCTTTNT CCAAAACCAAC ATGGGTGCGA  
 GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTTA GGAAGGGCA AGGGAAAAGA AGTGACTINGA TGTCTTATGA  
 GRAACCCGTA AATGGCTTAA AAAA

SEQ ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGGCA GGTATCATGA ACCACATTGT GGACCTGGAG TTGCTAGGAC CTTTCTGCC ATTACACAGA AAAATCCTCC  
 CTGAGAACAC AGCCATTNGA GGNACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGCGTGG  
 GGGCTNACGG CTGTAATCCC AAAACTTTNG GAGGCCGAGG TGGCAGATC ACCTAAGGTC AGGAGTTCGA GGCCAMCCTG  
 GGCAACATGG TGAAACCCGT CTCTACTAAA AATACAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TCCTAGCTAC  
 TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGTTG TGCCAAAT CTCACTCAA TCACCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCTGTCTCC  
 TTCTGGGGTT CTTGGTCTGG AGGAGTCTCC CCAACAGCGC CAAAGCTGGC TGTTTTCGCG CCAAGCCCC AGAATTGTA

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ATGAGAGGCA AATCTACCT GAATGCACCT CCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC  
TCCCCATCTT CTGGGGGCCA ATTGCTCTGG AACTGTGGG GTCANCTTCC TTTTAAAGT GCCAGTATCG GTGGGGCAGG  
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

CCGGCCCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CCTGCACCCA GCCCGGCTTC AGCCCCGATT CCGACTCCCA  
CCCCGGCACC AGCCCCTGCC CCAGCTGCAG CCCAGCCGG CAGCACAGGG ACTGGGGGGC CCGGGGTAGG AAGTGGGGGG  
GCCGGGAGCG GGGGGGATCC GGCTCGACCT GGCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

GTGTGCGCCT GTAGTCCCAG CTACTCCGCA GGCTGAGACA GGAGAATCGC TTGAACCTTG GAGGCGGAGG TTGCATTGAA  
CCGAGATCGC ACCACTGTAC TCCAGCCTGG GTGACAGAGC GAGACTCCAT CTATAAAATA AAATAAAATA AAATAAAATA  
AAATAAATAA AAATAAATAA AAATAAATAA AAATAAATAA AAATAAATAA TAAATAAAA TAAATAAAA TAAATATAA  
AAATAAATAA AAATAAANTA GAACCACCAT ATGANCCAGC AATCTCATTG GTGAGTATAT ATCCGAGGG

SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCCTCCT CCCCATCCCA CCTTTGGTA ACTCCCCCGC CCAGNCACT GCCAGATAT ATTCTTCTCC  
TTGGGCAAGA AGTTCTGTGC ATGCAGGTCA AATCTGAAAG GGNCAATTTCT TTCTTTAATG AGTGTCAGGG ATGGGGGATG  
TGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTIGAT GCTAAAAAAG  
AAGTTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTTGTGAT CCCNNTTAA ATTTTCATGT  
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCGCT CTGGAGCTGG ATGTCCAGGC TGCGGGCGCT GCTGGGCCTC GGGCTGCTGG TTGCGGGCTC GCGCCTGCCG  
CGGATCAAAA GCCAGACCAT CGCTGTGTGC TNGGACCCA CCTGTGGGG ACCNCAGCGG CTGAACCTCG GTGGCCGCTG  
GGACTCAAAG GTCATGGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCAGGC CGTGGACCAG GAGCTATTTA  
ACGAATACCA GTTCAGCGTG GACCAACTTA TGGAACKGC CGGGCTGAGC TTTGCTACAG CCATCGCCAA GGCATATCCC  
CCCACGTCCA TGTCCAGGAG CCCCCTACT GTCCTGGTCA T

SEQ ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACGTTG GCTGCCTGCA GGAGGCGCTG CAGCTGGCCA CTTCCTTCGN CCANCTGCGN CTCGGGGATG TAAAGAACTG  
AGTGGGGAAG GAGGAGGCTC CCACTGGATC CATCCGTCCA GCCAAGAGCT CTTCACTGTC TACAAGAACA TTTGAATCTT  
GGGACCTTTA AAGAGCCCCT

SEQ ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCGACT ACTGATTCAA ATGCTAATCC TGGACGGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT  
TGGGAGGCTG AGGCTGGTGG NTCGCTGAG GTCCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC  
TAAAAATACA AAAATTGCT GGGCGTGGT ACATGCGCT GTAATCCAG CTACTCGGA GGCTGAGGCA GGACAATCAC  
TTGAACCCGG GAGGCAGAGG TTGAGTGAG TTATTGCACC ATTACACTCC AGCCTGGGTG ACAAGAGCGN AATTCCATCC  
CCCCACCAA AAGCG

SEQ ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA  
GAGGACGCAG AGAGCTCTCT CACACCTTCC ACTGTCTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT  
CCCCAACCAG AACACCTTGA TCTTGGACTN CCCAGATGCT CCANATCTNT GAGAAGCAAA TTTCTGTGCT TTATAAGCTA  
TCCAATGTAT GGAATTTTNG TACAGCAGCC CCAACAGACT AAGNIATTAA TAAAATAAAG ATGTAAGATC TCTGTGAAA  
ATGCACAAAT AATATCT

SEQ ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTG TAAGCACAAA TTGTTCOGTG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCC  
TTTTAATAGA AAATGTCTAT TCTAGCCTGG ATTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG  
ACAGCTTACA AACTGGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTTG AAGATCTGGT TGTGGAAGC TGGGCGCCCA  
GTGC

SEQ ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTTTGCC AACATGGCCA TGTGAACCA CTTGCGCAGG CCCCCGTCCT GCAGTACCTG TACTACCTGG  
CCCAGATCGG CATCGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC  
CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCAGTT CCCTTNACC AAGGAGCCGC TGATGGAGGA  
GTACAGCATT GCCACCCAGG TGTTGAAGCT TCAGCTCCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GCTCATGAGC  
GG

SEQ ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAATT ACAAAACTT AAAACCGAGT AAACAAAAC TCAAGAAAGAA TGAAACAAT  
TGGAAAATAA CTTCAAGAAA AAAATGTAAA ATGGAACAA TACAAGANCA ATTGTGCCCC TCTGAAAAAC AGAGGTAA  
GTCAGAATTT TTTGTGNC

SEQ ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCTGGNAC CACACCCAGC TAATTTTTGT ACTGTTAGCA GAAACAGGGT TTCATCACGT TGGCCAGGCT GGTCTCGAAC  
TCCTGACCTC AAGTCACCCA CTGCTTGG CCTCCCAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCTTTA  
TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGAATTTAG GATACCTAGG  
AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACATA GGGAGAACCT TAGAGTCTCTG TGGAGCAGAA CCCAGCATTT  
GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTTGTGACTT ATNCCGGGGT CAATCTT

SEQ ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCTCTTA CTGGCCTTGG GCCATCCCT CTTTCTCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC  
TCCCAATAGT CAGCCTTGAC TTTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCACTTGT CCGATTATG  
TCTGCCTTAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCTCTG GAGCTCCTGC AGTCTGCCAC  
TOGCTNCTTC TGCCTGATAA CAAATACTAT TCCTTTTATC CTTGCAACTC GACCCAGAAA GAGGTGGCTG TCAATGTCCA  
AGGCCCTTGG GAAACGAAGG ACTGGAAATN TGAAACCACT GGGCACAGGG GGAATGGGTG GGTCTGAG

SEQ ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTAAATTT ATTTGGCTAG ATAAACTAC CAGCTAGATG GATTTATTTG  
GTGCCCTCAT ACAGAATGCT GTAGAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTCTAG

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GATGGAAACA AGTCCTGCTA TTTTCACAAT CCTAAGNGT TCTCCAGGCC TCTGGAGAAC AAAGTAAAGT TGTAAGATCC  
CCAAAGACAC GGAAAATCCT GGACGAACAG ATTAGAAATA ACTACAAAAA ACAAGTTTTT TACTTTCGAA AAGGGTACTG  
CACTGAAACC AAGTTGGACT TTTGGTCCAC CCCCAGGGCC CTCTTCAGG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTTT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGGAAATAGAC ACTAGGACCA  
AGGTGGCGGT CACCTTAAAG AGCCATAAAT AACTTTAAAA AATTAAAGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA  
CTATCTGGGA ATTCTTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTNTCAC AAAAGGGTGT  
GAAATGATCA CTTCAGACT CCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGGG GAGGTCTGGG  
CTGGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCTG

SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTGACAGG TCCACTGTCC CACGAGCAGA AGCTGTGACA AAGCTTGGA  
ATTGCCTTGG CATCCACCTT TGGCTCTATG CCTCTCTTCA CGGCACGGCT GACCAGGGGA CAGCTCCAGC ACCTTGGCAG  
AAGAGGGAGC AACACTTCCT GGAGGCCTGG CACCGGCTCG GAGCAGCCTG GGAGCATCCT GGGCCCCGAA TGTGCTCCT  
GCAAAANAGT ATTTTNTCCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCTGCGGCC ACCTCCTGTG CCGNCCCTGC  
CTGGGTNAGA AGCAACGGTC CCTGCCCATG ACGTGCACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGGAAAA CCTATTINAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT  
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGGTGAT GACAGAATGT TCCAGAACGT GACAGAGGTG  
GTGCCTACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATTG ATTTTITAGGT TATTTGAATT  
TCATCTCAAT TAAAAAACC AAACAGCAA ACTGCTCCCG CCAGCTTCAG CCCCAGGCA GACGGCGCAN CCGTGGGAGG  
GATGCTGAGC CA

SEQ ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGGTCAAG GCAGAGTTTA CTGAACININ AGTTTCTTCC TGCACACACC GGGCATGACA CCTTCAAGTC TGNCCAGCAG  
TGGGTCCAGA AAGTACCCTG TGTGCTTGG ACGCAGAGGC TACAGTTCTN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC  
CTCGGGAGCT GCCCCTGGTC TTTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGG  
TGGGT

SEQ ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTTATTGCA AACAAAATTG AGGTAAAAGA AGCTGACCCA GAACCCACGC CCGTCCAGGC TGGGGAAGTC TCTACTCGCC  
CCACACCAGG CCCCAGACAC CGCGGGCCCG AAGCAGCCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC  
TTAAGCCCCC ATGAGTACAA CTGCCCAGGG CTGCCCAATT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC  
CCGGCTTCAG GTGGGGCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTGGGGCTGG GGCACCTTCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAAACAAA CTCCAGCCCG TGCCAGTGGG GACTTGGTGG CCGNCGCTG CCAGAATGCT CCACTGCCAG  
CCGGCCCCC TGCTCTGGTT TCCCTCTGT TTAGTGGCGA CACAGGCACC CAGCTTTGGG GTGGTGCTGA CGTCCCAGG  
GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCAGACG CTCTCGAGG TGCCAGCTC TCCAGGGAGC TTCTGNCNA  
AGGNCGTCTG AGGGATCTGC TCCTAACCN CCA

SEQ ID NO:1845: (Length of Sequence = 441 Nucleotides)

GGGGAGGGGC GCACACACGA AGGGAGGTGT CAGCCGGGAC CGGAAATCCA ACACGGCAAA GGAAAAAAA CACAACCCGT  
 TTCCCAAAGG GAGGAGCAGC AGGAGACGAT GAAGAGAAGG AACAGAACTC TCTGGGCAAT TCTGATGTAC ACCCAGGTAC  
 AGTGGGGATC TCTTCACITG ATGCCCCAAA AAAGGGATAA ACAAAACAAA AACGTGAGCA GCCAGCTTCA TTCTCTCTC  
 TGCTTTGTCT CTGCCAGTG ACTTTGGGTT TTGTGTGAA GCTCTCTTAA TTCTTTGACC TTGAAGTTCC TCAACATCTA  
 TCCCAGTAGC CTCAGTTTCC ACTTTGCTTC AACTAACATC TTGGACTTTT TTCAGTCTTG AACAGGCTA AACCTTTGAG  
 ATCTTGAAC TCGACTTCAG CCTACTTAGC TTGATACTAC C

SEQ ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATTCAT TGIGTATTTA TTATTCACAG TTAATCATA CCTACCAAT GCTATCCGA GAGTTAAAGG ATTAAGTACA  
 TAGGTCITTA TTAAACACT GATTTTTTTT TTAAATATA TACACACAAA ACTTAGTTCA GCAAGGCTTC ATGATATACA  
 CCAATTCOA AATAAAACA TCAAATGGTC CNGNGTAGA ATGCCAGATT CCTTTTATCA TCTGCGAGGA AAAGAGAAGC  
 AGGATGAGGA AGAGT

SEQ ID NO:1847: (Length of Sequence = 311 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCAC CTCACTCG CAACATTCCT CCCACATCCA CATCCACGAC  
 GGAGCCAAAT CTCATTGTIN ACCCTCAGTC ACCACCCC CATGGAGC CNCTGGTTAC GNCATGGATG ACAGGTGTCA  
 TGCACAGGGA GAGAAATTTT CCCCGGATAC CCTTGAGG GGNCCAC CCCCAGGCTA GGGTGGGAGG ATTTAGAGCA  
 GTGCAAGAA CCAAGGAGGA TGGAGCATCC AAAGGAAGC AGGCAGGC TNGGGGATTG AGGGCAGGAA GGGCT

SEQ ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGTCTGTAT GCGGACCCTG CCAITGTCTAT CATGGACGCA GGCCATGACC ATCATCACCA  
 CCCATTTTNT TGTCTGAAGA GAATCCAAC GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATCTA CATCAGCCCC  
 TATCATCCGG TAGCTGAGGA AATAGTCACA GGTCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT  
 TTCCACAGTC GTCCACTTTG ATTTTGGCAA ATGGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTCCGGTG T

SEQ ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCCC CAAGAGGGGC CTCAGTCAG AATGTGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCCATGG  
 TGAAAGCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTGTGG GAGCCGGGGC CAGGCGTGG CGTGAGGTCC  
 AGAGGGTAGG CGAAGGCTTG GCCATGCTGT AAGTAGGGCT GCGGTCTTNA TAGATGGATG GCTCAGGTGC GCGTACGTG  
 GTAGGTCCAG GGCTCCTGC CACATCCTCC TTGTAGANCC AGTTCTTGTG CCTGGAGGCC AGACTNTAGC AGGGAGCA

SEQ ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTTTCCCT CCAGTATGAT GATTTACTTT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCCT  
 CTAATCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTGAG GAGTTGAGA CCAGCCTGGC CAATATGGTG  
 AAACGCCGTG NTCTACTGAA AATATAAAAA TTAGCGGGT GTGGTGGTGT GCACCTGTAG TCCCAGCTAC TCAGGAGGCT  
 GAGGCAGGAG ACTCACTNAA CCTCGTGGT GGAGGTGCA ATGAGCCGAG ATTNCACCAC TGACTNCAGC TTTGGCAACA  
 GAGCAAAGAC TNCGTCTTCA AAAAAAATA ANAAGGGAAA AAAAACCCNG NAAAAGCTTT TTTATGTGTA AAAACAAGTG  
 GGTAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

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CTGAGGGGCA TTTTATTATTA TAAATTTAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTCA  
ATATAAAAAT TTTAGCAGCA TTTCATAGT TTCAGGCTCC AACATTAGTC GTACTTCCTC CCTCCCGCTA TCAAAAAAAG  
AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC  
CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG  
ACAAGGAT

SEQ ID NO:1852: (Length of Sequence = 174 Nucleotides)

GGGCAGGACG GCTCTNGGCC CTTCCTGGCT GACTTCAACG GCTTCTCCCA CTGAGAGCTG AGAGGCCTGC ACACCTTTGC  
ACGGGACCTG GGGGAGAAGA TGGNGCTGA GGTTCGTGTT CCTGGCACGA GGCCCCAGCG GCCTNCTGCT CTTACNAACG  
GAGCAGTAAG GACG

SEQ ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACACGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCACAT ATACACACAC ACATATACAT  
GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC  
TGCATGTTCA CACACGNGGA CGTGCACAG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG  
GGGGTTGGCT GT

SEQ ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAAACAATG GTCTGCAGCT CAGTTACTCC TCATCCTCGC CTGGGCCGGG CCAGCATCCA CTCCCCTTCC  
TGTAAGCAT TTGGATTTC TTGGGGAAAC AGCCCTGCC TCTGTCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA  
GTGACTCATG TTGGTTCACT GATTCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT  
TGGGGCACTG GGCAGTTTCA CATCCTCAAG GCTTGGCCAT CATCGGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAATGCTTG TTGATATTTT AGTTATTAAT TCATATTAAC TTTGGCTGAA ACTTTTAAAT TCTATTGIGA ATAGTCAAGT  
AAAATTTAGA TTGTTACATT CTGGGTTAGT ATTAGATGTT TTPTAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT  
TTAAATAGTT CTCTTAACAC AAATAAGCT TAATATGAGT ATTGAAGGA AATTATCCA AACCATTCCA GTTCCTGGCT  
GTGAAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEQ ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCAGAGA TCAAAGAGC CCTTCGAGCA CCACGAAGA AGATCCATCG CAGAGTCTTA  
AAGAAGAACC CACTGAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAGACC ATGCGCGGA ACACCATTTCT  
TCGCCAGGCC AGGAATCACA AGCTCCGGT GGATAAGGCA GCCTCTGCAG CAGCGGGCAC TTACAAGCCA AATCAGATGA  
GAAGGCGCG GTTCAGGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAGCT AATTGGCAAT AATCCTTGG GGAAGGTCAG ACTCCTCTCT TACAGATCTA GGAAGGCCT GGTAAATGA  
TGGCTCTTTG GAAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTCGGC CCTCAAGCAT AGGCAACGAA CTTGTTCTTG  
GCTTACGNT TTCTATTGA ATCAAAGCTC TCATGCATGG CCTGGATTG TAAACACATG CTGGCTGCCA GCAGTGGCAA  
GTTAGCCTCC TGACCCACTT CTCTCTGCT TCACTCTGG TGTATGAAGG GGGATGAGG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

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TAAGACTTCC TGTTAGTAAA AGCTACCTCA TGAAAAGTAT TGATGTTATT TGCCAACATT TAGACTAGCT TTTGTTACCG  
 TTTCAGTTAT TCAATTTAGT CAGCACATGT TTGAGTGTCT TACTGCAGGT GAATAATCCA TGATTTCTGC CCCAGAGTAG  
 TTCATAAGAC TGGTAGGATA CATAGATTTG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT  
 ATAAAGCAAT GTGCAAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTTAG TGCTGGGGCT TTGGAAGCAA ATGTACCTGA GTTTGAATCT CAGGGATAAC CTTTGTACTG TGGCCCTGGG  
 TAAGTTACTC ACTGTCTCTG AAACITCAAG TTCTCATATA ATAACCTAAG ATGGACAATC ATAACCTCTCT CTTGGATTGA  
 GGTAGGAGAA TATGTGTGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TTCTAGAAC TAAATTAAAA GGAAAACCTT  
 AATTTTCCAT GCCTAAGTAA CAAAAGGACC AAAGGTTACT CCGTTTGCAA ACTCCACCT TTTCTGCATG GCAGATGGGA  
 AGTTGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACCTGG CCCCGCTACA GCAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCCTCTCC  
 TTCTTTGGGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA  
 CAACATCGTG GTTCTGCTCC AGACGAGCCC TTACCACGTT GACTCACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG  
 AGGATCAGGA GATGGCTCGA GACCTCGTAG AGAGAGCGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTCGAGAAA AGCAGGCAAC AGAGGCCTGA TGCTGACAT TGAATCTTTG GAAGATTAAA  
 CTTCCTCACA GATTTTINATA ATNACTTTGG AAATNATGAC TGATCGCCAG GCTGTTCCIT GGGTGGACAG TTTGTCTTTT  
 TTTTITTTTT TTTTITTTTT TTT

SEQ ID NO:1862: (Length of Sequence = 296 Nucleotides)

TTCCGGCTTCT TAAAGTTCTT CCCATCCCTC CTAAGGTCTA AGATGATGCA TTAAACACAG AGGATGCCCA ACAGTGGCTG  
 ATGGAATTAC CAACTAAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTTTA AATTTTATTT TATTAGTATG CAGGTGGGAT  
 TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT  
 AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAAA AGGGGCTCAA ACCAACAGGA AGTCAGCCCC ACGCAAGCC GGACTACAAC TAACTGTGTC TCTCCACGCT  
 CAGGCGTGGA AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATTTCTGAAC GTTAGCAAT  
 CAGGTCCCTT GTAATGTGCT TGGAGAGTNT GGACAAGGCG CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGAA  
 GCAGAAGGCG ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCAACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCTGTGG  
 ACCATGAAGA ATGTCACCAA GCTCCCTCA GATCAGCGG GAGCTCAGCC AAAGCACAAG TGCACTGCCC AGCTCCTCCC  
 ACTCTGCACC TGCTGCCTCA NACTCCCCAC GCTGAGCCCA GGCCCTTACC CTCTGAAGGT GTTTCCCATG TGATTTCTGAC  
 ACACACACCC CACAAGAACC AGATGATCTA TENCATACAG CATTTAGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

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CATTTCTGTT ACATTGAGAC TTCAGTCACC AACATCTGGT GGCAGAGATA CAGGTGTATG AAACATTTCT ATTTACCCAA  
ATATGCCAGT TCCCAATAG GATGACTGCA TTTAGTGTTA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT  
TAGCTTCTTG AATAGAAACC ATCCAAATGA TGTTTTTTTT TTGATATGTC TGTAACTATA AAAATCAGCA AATAAG

SEQ ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATTGAGAA AATGCTCACA GACCGGCGGT CTACAGACCT  
TAATGAGAGC CGCCGTGCAG ACGTGCTTGC CTTCCCAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG  
AGCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC  
GGACCCGACT GCTCGAGGGA TGAAGGGGGG TNCCTCGAGG GCGCAACCCA GCACTCGCTC CGAGATGGAG GAGGAGAAGT  
CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA  
CCCCCTCTCC ACCCTGGACT GGCT

SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCACGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG  
CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCACGTT GGGTIGAAAA GTTGAAGAT TTGCACTTT ATTGAAAAGA  
ATTTTCAAAA AATGTTTCTG TACAAATGAA TGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC  
GGTCACCCAC CAGCTT

SEQ ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGTTTTT TTTTATTGT AGCTATAGCT ACAACTTGGC AGCATGGGGG AGGGTGGGAA TGTCTGGAG GGTCTCCAG  
CCCTCCGCAA GCAGAGTACA AAGGCTGCTC GGGGGGCCCG CCGAGGGCGC GGTGTCAGCA GTGNAAGCAG CAGCACTAAA  
CCTGGTGCCC CCCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCCAGGGCG  
GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTGAN GGCACCTNGG NATGCTA

SEQ ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTITGGAGG TATCCCATCC CTCTCCAGA TGCCAAGGAG  
CTGGAGCTGA TGTITGGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCGG GGAGGCCCTT  
TAGCTCATAC GGAATGGACA GCGACCTCC CATGGCAATT TTTAGTGTGT TGGATTACAT AGTCAACGAG CCTCTCCAA  
ACTGCCCAGT GGAGTNTTCA NTCTGGAATT TCAAGATTTT NTGAATAAAT GCTTAATAAA AAACCCCGC AGAGAGAGCA  
GNTTTTNAAG CAACTCATGG TTATGCTTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGNN  
TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGGNACAACC AACCCATGNN TGNTGNGTIT TAAGNGTTTT

SEQ ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TTTGTTAAAC ATCTAGGTTA AAATGGTTAA AAGGATTTTC ATACAATTTT AGGCACTATA CACGTTGTTT  
ACAACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTITGAC ATTCAAATA  
ATTCCATTTA AGAAACATTA ATCAAACTT AAAGAGACAT ACCACTAAGT ATCCACACA GTATACTGAA AATAAATATA  
GNAATACAAC CAGAAGTCTA CAGNTACCA CAGTAGACAG ACTGGTGAAG NCCCAGCTTT TCATGGGCAG TNAAGGGCTC  
TGGGCTAGAT TTGGGTGTCA ACTG

SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTG TCATTCTCC AAGGTCAGCA GGGGAAGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG  
CCACCTGGCA CTATCTCCAC GTGCTCCACA CGAGGGGTG CTTCTCACT GGCAGCAGCT GCATTCTCT GCTTCTGCCT



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CAGCTGCCTC TCCGCCCTTG CACACACAGT CCTTGGCACA CTCTCTACAC TNOGCAGGCA GCAGGAGCAG CAGCTCTTCT  
TGCAGGAGGT GCATTTGCAT CCTTCGCACT TGCAGGAG

SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCTTCCCTT GCTTCATGCG CAGACCCTCG TGACTCCCCCT TCCCTTATAA GGGCCCCCAT  
GATTACTCAG GGCCACCTC AACCATCCAC GGTCACTTCC CCACCACGAA ATCCTGAACT GAAGCACAGG CGCCGGGTCC  
CTTTTGCCAC GCAAGGTAAC ACTTTCCAC GTCCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TTNCACCCAC  
CGTCATCAGT GAGGCGCCTT NAGGAGGGGC T

SEQ ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGTATAG TGCAGTGGCG CAATCTGGC CCACCACAGT CTCGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGCCT  
CCCAAGTAGC TGGGACTACA GGCATCCTCC ACCATGCCCC GCCAATTTT TGCATTTTTC ATAGAGAAGG GGCTTCACCA  
TGCTGCCCAG ACTGCTCTCG AACTCCGGG CTCAAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTTAGG ATCAGACCG  
CGAGCCCCTG GACCCGCGCT ATAGTTTTG TTTGCTTTG TTTTGTGTTT TTGAGATGGA GTCTCACCTC GTCANCCAGA  
TGGGAGTGCA GC

SEQ ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTCCCCCTCC CATACTACC TCACCCGGCC  
CCCAGCCAC AGAGAGGCTG AGGGAGGGGC TCTGGTCTCT CCTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTTCAC  
CTTCTAGATC TTTCCCCCA CCCAGCCAC CTCAGGCTG GGAAGGTGA GGAATCTTT CCTCCACAC CCTACCCAC  
CTCACCTGCA GCCTGTGCCC TGGGCCAGGA GAGGCATGG TGAACAACCA GACCCACAAC CCCCAGCCCT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GTGTCCACC CACCTCGGCC TCCCAAAGTG CTGGGATTCC TGGCGTGAGC ACGCTGCGCC TGGACAGTCT GCCCCTAGAT  
GAGTGGCCA GCACGTACA GCTACTGCCT GCCCCGACCC CAGCCCTGA TTCTACCGCC GCTGGGCAGG GGGACGGCCA  
GGGAGAGGTC CAGCCGCGG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AAATAGTCAG CAAATTCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAG TCAAGAGACA  
AATCTTTCCT CCCCATTCT CACTAATAGT TATTGAAGGG GAAAAAATAA AACCCACAA CTTTTTAAAC TAAAGATAAA  
AACAAATGAA AATGAATAAG ATCAAAGAA TGCTTTTGT TACTCTGCCT TATG

SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TTTGAAGAAG AAGAAGTTGA ATTTATCAGT GTGCCGTGCC CAGAGTTTGC AGATAGTGAT CCTGCCAACA TTGTTTCATGA  
CTTTAACAAG AAACCTACAG CCAATTAGA TCTTAACCTG GNTAAGTGCT ATGTGATCCC TCTGAACACT TCCATTGTTA  
TGCCACCCAG AAACCTACTG GAGTTACTTA TTAACATCAA GGCTGGAACC TATTGCTCTC AGTCTATCT GATTTCATGAG  
CACATGGTTA TTACTGATCG CATTGAAAAC ATTGATCACC TGGGTTTCTT TATTTATCGA CTGTGTCATG ACAAGGAAAC  
TTACAACTG CAACGGGAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

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GAAAAACAAG GAAAATAGGC AACAACTGC AATGGACACT TTTCTCTACA GAACCTTTTC AACCTGAAT TGAATTGTTT  
CCTATTCAAT TNCATAATAA AAGTTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC  
CATTAATAGG ATTGAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCTTTACAGT CAGAATGCCT  
GAGTTTTGAG GCACGTGTAC TTCTAAACAT CTCTAAGTTT CTATTNCTC ATCTAAAGGA GTAATATTAC TTTCTTAA  
AGGTG

SEQ ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTCAGCG AGCCAAGATC GTGCCACTGC ACTCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAAA  
AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGCTCCCG GGAGGACCCT TCCCTCCAG ATGAAGTGTG  
ATGGACCAGC CCAAAGGAGG GGAGAGAGCA CTINGGCCAT AGTGGTGGTG GATCTTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCCTCCT GGGGTATGAG ATCGCTACT GGAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG  
GACAGCAGGG CTGGACACCA GTGCCCGAGT CAGCGGCTG CATCCCAACA CCAAGTACCA TGTGACCGTG AGGGCCTACA  
ACCGGGCTGG CACINGGCCT GCCAGCCCTT CTGCCAACGN CAGGACCATG TAAGCCCCCT CCGCGCGAC CTCCTGGCA  
ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT  
GAAAGTTGTC TCAGTGAAGG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEQ ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCAGTGG CACGATCCCG GCTCACTGCA ACCTCTGTNT  
CCCAGGCTCA AGCTAGTCTC CTGCCTCAGC TGCCCGAGCA GACGGGACTA CAGGCACCCC CACCAGCCCC GGCCAATCTC  
CAAATGGTTC TTTTTCCTCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEQ ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTTT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG  
CCAGGAAAT TACCTTCTTA ATTACATTTT GCAAATGTTT ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG  
TGGCTGCTGG AAGCCCCAGG GCACCGTGGG AGGGACAGGG GAACGTCCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTCGCT CTATGTGCCA TCACCTGGAC ACTCTAGGTA ATACCCCTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG  
GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCCAT AACTGTCTC ACAGGATAGA GTTGATACCT GGTGCTTACA  
GCTTTCCTGG GCCAGTGTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTCGCGTGTG GCGGTTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAAGG  
AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGTGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT  
GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAACCTC AT

SEQ ID NO:1886: (Length of Sequence = 208 Nucleotides)

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CATCCGCATA GTATTTACAT CATGGGTATA GGCAAGTNCI ACAAATCAGG NCTTINCCTT GGGGATGGAT GTTTGGAGCT  
AGTTTACCAG CACACCAGTG GGTAAAAGTG AACAAATACT TTTTIGATCC CACAGAATCT TAAAAAATAC TTTACTTCGA  
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNTG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCACT GCCCGCCAAC TCCCATTCOA ACTTCCTTTT TACACTGGAT GTTCTATCA CATCCTGAGG ACCACTAACC  
CACCAGCAAG TCTCCCCCTG ACACACATTC ACGTAGGTCC ATACCCCTCA GAGTCTTAAA GGGTTAATGA GAAGCCACCT  
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCTCCC CTTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC  
ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCTCTCCA  
CCTTAACACC AA

SEQ ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACGAG CTGGGGGCGA CCTCATGCAC  
CGAGACGAGC AGAGTCGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCCGCTACC TGCTGGACCA  
CGCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACCTTACTG AGTCACACCC AGCTGTAAAC ATGTCACCGT GAGANTCCCG CCCCCACCC CCAGGCGCGA CAGTCCGCGA  
TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTGCAGCA GCGCTGAGT  
TTCCGGGAGG AAGCCCGGAG GAGGTGGGT GGGCAGGAG CGNGGGCTGG GGACCCGCC GAAGACCAGG GGGCCAGGA  
AGCCTCTTTT CGAAGGNCI T

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTGCGAGACT ACGAGACGGT GGTCAAGTG AAGCCCCATG ACAAGGATGC CAAATGAAA TACCAGGAGT GCAACAAGAT  
CGTGAAGCAG AAGGCCTTTG AGCGGGCCAT CGCGGGCGAC GAGCACAAGC GCTCCGTGGT GGACTCGCTG GACATCGAGA  
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGACGGCAA GTGACAATCA GTTTCATGAA GGAGCTCATG  
CAGTGGTACA AGNCCAGAA GAAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC  
ACCTCTTTCC TCCCCACAAC CATTTACTGG GAAGTTGTGT ATACTTGGCA GTNIGGGAGG AAGGTACTTG GAAGACCCTG  
CCAGCCATCT CCCACCCAGA CTCTTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA  
GACAAAGGCG CCTTCTTNA GAGAGGAGCT GCAGAGAGGG GCAAAGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCAAGGTC ATCCAGTCG TCGCTAATTA TGCAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA  
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAA CAACATCGAA GATTGCGGTT GTTCTGGAC TTCAAGCACC  
CAGGGCACTA TCCGCTCTAC AACCTGTCCC CGAGGACCTA CCGGCCCTCC AGGTCCACA ACCGGGTCTC CGAGTGTGGC  
TGGCAGCAC GGCGGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNCCTGGCTC GGCAGGACCA  
CAAGAACGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

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CCAGATAGAG TTTCIGTTTT TNAGITTTTAC ACGTGCCACA TCAGGGAAAG TTAGGTTATG ATTAAAGCAA GAGATGATAG  
 ATGAACAAAC AAAGAAACAA CAACAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA  
 TTGGACAATA CTGATCAAGA GGGGTTTACA TTTGAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATTT  
 TGGCCGGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTCC  
 AGACCAGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAATACAA AAACTTTINC CGAGCGTGGG CCGGCGTTG  
 GTTGGCTCAT ACATTINATN CCCCNCITTT NGGGGGCCCC NCCGGGCGGT TCACCTTAGG GTCAAAGGGT NCGGGGNCCT  
 TCTTGGC

SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GGTGGTGAAG TGGGCTCTGG AGAAGCTGGA GCTGACCAAG TACGAGACA AGCCGGCTGG CACCTACAGC GGCGGCAACA  
 AGCGGAAGCT CTCCACGGCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCACCAC AGGCATGGAC  
 CCCAAGGCCG GCGCTTCTCT CTGGAACCTC ATCTCTGACC TCATCAAGAC AGGGCGTTCA GTGGTGCTGA CATCACACAG  
 CATGGAGGAG TCGGAGGCGC TGTGCACGCG GCTGGCCATC ATG

SEQ ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTIG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG  
 GGAGATAGAT AGTCACAGTT CCCAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCATTC  
 ACCTGGNGAA TTTTCTCTC CCACTGCCCT AAACACTTTA TTTCATCAC AGGGGAGAAA TNCCTGCTGAG AAGG

SEQ ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTTAAAGTG TAATAATATG ATTTTAAAG AGAAATTTAT TACTGTGTC AAAGGTCTTT TTAAACCACT TTAGATTTCA  
 AGAAAAATA AATGAAATC ATCGAAATC CATTTCACAT TAATGGTCTA AAAATAAACC AAAGGACATT ATGTGTGCAT  
 GTGTGTATAA GTGCACACAG AAATATATAT NCATATGNG ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA  
 CTTGTATAAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEQ ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTINA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTCAC AATATACITG  
 CAGAACTGTG CCTGGSGSAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AAWCTCCCC  
 AAACCTTAA GGCATCCTTT TCGTAGTGTG TGTCCAYAG GTATGGCTGC TGAGCACCAG GGGCTGCTCA CCATGNTCCC  
 AAGAAGCAGA GTCANGAGG CAGACAGCAG GGTATTATTA GGTGCACA

SEQ ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG ACACCTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
 TTTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGCTGA GAACGGTTAG CATATCGAAT  
 GATCAGTAAA AACATGCAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGATGG AATTTAGAA  
 CAGAGGAGGC AGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA  
 GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGGTC GTCCCCCTGG ACGTGACTTA GCAGTGACCT TGCTGCC

SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGGTTTATT TTATTAGGAA GGAAACAACC AAGCACCCCA TGTTCCTGCC CGMACTCCC GGGGGGAACA  
 TGCCAAAMAG CCGGGGATCG AACCAGCCC ACCTGTCTGT GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCGTGT

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ACTTYYTATT GTTAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTCTT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT  
TTCTGATCAA CTGATGATTC TRACCGCTT CTTTCTCTCT GGGGGGTAAG ACACTTGTTG TTGAGCTCTG GGGATGATGG  
AGAAOACTC CTCGGCCTAG GAGTCGAGG CAAAGCTTTC GGTTCGCGG AAGAATCACA TTCGCTTCTC CCTCTAGATG  
GCGTTCAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TCCAGACCC ATCTCTAAGT  
CCTGGAGAAG ACCCAGACCT GCTTCTCCTT GATGGAGTTC TGGTAAACCA TCTTTCATTT CAGGAGAAGA TGCAGACTAC  
TTCCT

SEQ ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRATTCATA TGCTAGTTTA TTTATCTTAT TATTGAGAGA TAATTTCATG ATGACAGTTA TCAATAATCA ATTACAATAT  
CAAGAAATTC AAAGAACAAA ATCTTGACAGA GACTATGCTT TTGTATTGG ATTTAAAAAG TATGTGATCT CATTTCACA  
TACCAAGCTG AGAGGCCATT TAGACTATCT CTTTGCTAAT TTTTGCTTAC TGCTGTAGGG AAGAAGATTT CCAATGAMCT  
TTAG

SEQ ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTTAAA AATAATAAAA ATTCACATA TACACATAA AAGAAATAAA AAGAAGTCTC  
AGITGCAGCT ATTTGTCAAA ATTAATATCC ATTTCTWTTW ATATACGGTG AATAATGCGC AATTATAGAT CTGGATTTTA  
AACCCTTAA TGAAGCGGCA ACACCAGGTG TTTTAAAGTG TTGGCATCTC TCGCTGATTT GGCTGTTCCT AATGTTTACA  
TTATTTAATC TTGCAAAAAT GGTTCGATG CACTTGGGAT GTGAAATGCT GTCCCGTTTT ATTTTPTTAA TGTGTATATC  
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTTTATATT CCACAGTCAG GTGGGTCTGC GATASTCATT TAATGTTAAA CGCCATCAGG GGCTCTCTCT CCCGTTTCTG  
CCAGGGGCTT TTCTGTCTT CTCTGTGTC ATCATCATCA TCGTCTCTCT CTTCCTCTGT GGCAGATCTT CTCTGGTGGG  
GGCTGTCTGC TGGCTCCGAG GGGGCATCCG CAGTCCGTCT GGTCTCTCTC TCCTGCAGGC TGGGCAGCTG GCCACCACTT  
CTCCGACTCG ACCCTCCAA CAAGCATCGC AGGGCACTGT CCTCGGGGGT ACAGACCGTG GTCCACATT CGCTACCACT  
CTGTTCACG NCATCCAGGG TACACGAGCT GGTGTAGGC CGTGTCTCT TGGGGCTCGA GGCTCTTCTCT GCTGGTCTC  
TTGGACGGGC GGTAAATTC T

SEQ ID NO:1904: (Length of Sequence = 423 Nucleotides)

GTCTGTGCGC CCGTCTGAA GTGACGGTGC AGCCAGGCTG CTCCCTGCCC AGCAACCCCG AAGCCATTGT GCTGGACGTC  
GACTACAAGT NTGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT  
TAGTGAACCTT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGACGAC GCAGGAGGCC GACGGCAGAA  
GATCTCTGG CAGGCAGCCA TCTTCAAACT GGGAGACGAC TTCCGGCAGG ACATGCTGGC CCTGCAGATC ATCGACCTCT  
TTCAAGAACA TCTTCCAGCT TGTGCGCCTG GACCTCTTTG TTTTCCCTA CCGCGTGGTG GCCACTGCC CTGGGTTCGG  
GGTGATCGAG TGCATCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACGAGA ACATTTTAC TCTTTGGGCT CTGGGAAGGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAAGCAGA  
GAGGAGCTAC AGGGGGCTGC AGTCCTAGTA CCTGTGTTGG GAGGACTGAG GGATGGTGAG TTTGGTCTCC GGAGGGGGCT

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CCAGTCCTGG TGGCCAGTTC TNACANCTGC CCTCCTGAG TTCACACTGG AGTCCTTGCA GTCCTGAAAC CACAAGGCCT  
 NCCTGAACCC TGGGTGAGGA GAGAAANACT TGGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT  
 CCTGGGGCTT GTGTCTTTTC CTTGGCAGAA GAGGGCACAG CCAAAGGCAA

SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCTT CATTCAGTGA GGAAGAAATG CTTTCACTCT GGAATTCAC AGCATCCCAA TCTGACGTTG TACCGTGTG  
 ACACTGTTTG TGAGCCCCAA GTTTCAACGA GCTCTTGCAA GTAAACGGAC ATTGTCACA TTTGTAGACA GCTGTCTTTC  
 CAGATAAGTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC  
 CTATTATGA ATCTNCTAAA TGGAATCCCC TTGGTCTCCA ATAATTGTT GCCATCTGAG CCCATCAGCT GCTCTGCAGA  
 CAGGCCTGAT GTCTGGTGAT CCACAGCACT TAAACCATTG TCACTGTCT ATTTCATTTA ACTCTTCATC AGAACTAGAG  
 TCATTAGCAT GCTGT

SEQ ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAAATCCTG TACGTGTCAA CTTTGAAATG TATGTGTGTT GGTGGGTGG TGGTGATGTG ATACGGTTTG GATGTCTGTG  
 CCTCCAAAT CTCATGTGA ACTATAATCC CCAATGTCC AGTTGACGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG  
 GATTTCATG TTTCTTCAC TTCCCTTGC ATCTGAGATC CTGCTGAAA CCAC

SEQ ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCACATGT CCCAAGCCTG TNAGTGGCCC TCCCTGGTGC ACTGTCCCCG AAACCCCTGC TTGGGAAGGG  
 AAGCTGTGG GTGGGCTAGG ACTGACCCCT GTGGTGTGTT TTGGGTGGT GGCTGGAAAC AGCCCTCTCC CACGTGGCAG  
 AGGCTCAGCC TGGCTCCCTT CCTGGAGCG GCAGGGCGTG ACGGCCACAG GGTCTGCCCG CTGCACGTTG TGCCAAGGTG  
 GTGGTGGCG GCGGGTAGGG GTGTGGGGC CGTCTTCTC CTGTNTCTT CCTTTCACCC TAGCCTGACT GGAAGCAGAA  
 AATGACCAA TCAGTATTTT TTTTAATGAA ATATTATTGC TGGAGGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG  
 ATCTGCGGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAT CCAATTTTA TTAAGGATTT CAGGTACAT ACTTCAAATT TCTAGAATGG AATGGAATCA TTTTGAACT  
 GGAAAAATGG CATAAACT GAGTCCCTT AAAACTTCAA TTTTATAAG AAAATCTTC TGCAAACCAC ATCCCTTTA  
 TGTAACAAGA CTAGGTATTA TCTACACCTT CACTTTGGCA ATAGCTATTT CCTAAAGAAT GAAAAAGATG ATTTTNTAC  
 TTCAGTTTAT TAAAAATGGG ATTCTATCTT TGAAGTTCAG AAAAGCTGC ATTTGATGA ACTATGGGTT AAAAAAAAAA  
 GCACATAGTG TCTAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCAGGGA GCACCAATCA CAGCAGGGC TCTGGCCAG GTGTGGCAG CCCAGGCCTC CATTGCTAA TGATTAATAC  
 ACTGTTTGGG CTGGCCAGTT TTTCAATCAT GCAGCTTGAC GATTGAGCAC AGTCAGGCCT TTGTATTAAA AATGAAAAAT  
 GAAAAACAA ATTCAAAC TATTCAAATG GGTCTAGTT CAATTTGTTT AGTATAAATT GTCATAGCTG GTTTACTGAA  
 AACAAACACA TTTAAAATTG GTTTACCTCA GATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC  
 CACTGGTAGG ATGGTCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGGC ATGCCCGTGT  
 ATGTTGGTTT AGCGTTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

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AATGCACCCA TTGGCTGCC AAGAGCTTCT CACTGCCTTG CTAGCAGCCT GCCACTGTC CTTGGCAAAT TGAAACCACC  
 CACGCAACA CTCAAAACCC CAATCTCCTT GCTAATAAGA TACAACCACT TAACACCGTG AAAAATGCAC ATCTCCAGCC  
 TTCATTTCAA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA  
 CCAGTACCAG ATGTCGTAGT TTGGTTACA GGTTTATAAT TAGACACAAA ATCACTCCA CACTGGAGTT TTAATTTCAA  
 GCTGGAGTTA GCATTAGTTC TA

SEQ ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAACT TAAAAAATC TGAACAATA GAAACTGTAC AGATTTGATC AATCTTTTTC TTTTGTFTTT  
 AACTAAAAT CTCTAAACAC ACCAATGTCC CATTCAAAA TATTCACAA CATTCGTGAT ACAAACCCCT TGATTGTATT  
 CCTCTTNCAC TAAAGAAAA AGTTCAATGAC CTGCTCCCC GGGCTCCTCT CCAGGCTTGC CTCATGCCC CCTTCCCATC  
 CCTAGGGAGA AACTAGAGA ATCTATAACT CACTGCATTG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCIT  
 CAGANGNTA ATCCACCTTT TGAATTTGTT CTGGGGGAAA GAGGGGTAGA TAGAGGGATG

SEQ ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGT TTGCTGTTT GCCCAGGCTG GAGTGCAATG GGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC  
 AAGCCATTCT CTGCTCTCG ACTCCCGAGT AGCTGAGATT ACAGGCATGT GCCACCACGC CCAGCTAAGG CTTTGTATTT  
 TNAGCAGAGA TGGGGTTTCA CCATGTGGC CCGGCTGGTC TCAAACTCCT GACATCATAT GATCCCCCG NCTCAGCCTC  
 CCCAAGTGCT GGGATTACCG GTGTGAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTITAGG GGGACGATCA ATGAGGATTC  
 TCTTCTCTGA GTTACTGCAT GTGTACAGT TTATAATCCT T

SEQ ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGGCCTTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTTGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA  
 GAGACCTTTA TCTTCCACC ATTGAAGACA TTAAAGACGA AGCAAACAAG TTCACAATTG ATAAAGTTTG AAAAGGTCTC  
 ACAGTAGTAA CCCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGCTGT TGAAGTCTC CTGCCAAAAT TIGCCATCCG  
 AGGGATGCTG AAAACCTTTG GGCTTCATGG AGTCGTCTTA GATGTTGATT CAGTGAATGA ACTGGTGCAG GTAGAAACGT  
 ACCTCCGAG TGAAGGTGTG CTGGTGGAT ACTTGGTATC CTATTTGACA TGTGGGAAA GGGCCCCCAG CAGGCTACCG  
 AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGTTTATA GCAGGAATAC TGTTCAGAA TGAATGGAG GGAAAGTGTG TGTGTATATG TGTGTGTGTG TGTGTGTAG  
 TTTTGTGAG GTAGGGGAGA CTATTTTGT GGTTCAGTCA CTCCAATTAT TGCCACAATG CACTTTCCTT CATACTGCC  
 CCACCAAAGG TCTTAAAGC CATTTTGGG GCCTATGCA CTGTGTCTC CTACTGCAA TATTTTCATA TGGGAGGATG  
 GTTTCTCTT CATGTAGTC CTGGGAATG ATTCTAAGG GATGTTCTTA GCACTTTAAT TCTGTCAA TTTTGTGGT  
 CTCCCCTTCT GCCATCTTAA ATGGTAAGCT GAAACCTGGG NCTACTGTG CTCTAGGGG TAAGCCCAA AGGCCAAAA  
 AA

SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TTTATCTGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGG GGTGGGGGG  
 ACAGAGGGGA GGACAGGGG TCAGCCAGGG GGACCGTCTC TCTTCCAC GCAGGACACT GTGCATGGGG CTCTGGGTGC  
 ATCTGCCCAT CTGTCTATGG GCCTGTGTGT GTGTAGAGG CCAACACAG AGAGCTCCGT GGTCTGTGT GTATCCAAGT  
 GCTAAAAGGC AGGCTGGCTT TCTGGGCCC ACAGCTGGCG GGCTAGTATC CTGGAAGGTT TCACTTGGTG GCTTGGCCTA

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GGGACCAGCA AGGGCTTGGN GTTGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEQ ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAAACTG  
TCATAGAAAT AAACGTGATA TACAACAAAT AAATCAATGA TTGTTAACTT TTTTAGACAG TTTGAATATC AGATTATAAT  
GAATAGCATT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAT TTTGAAATTT  
TGGACCCAAA ATTATGTCAG TAATTTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC  
AGAAACCGTC AATTAAAGTG TACCCACAA GTGATAACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGTGCAGA ATGTGATTAG TTTATTAATC ATATGTGAAA ATATTAGTAG CTACATATGG  
CCAGAATAGA TTTTCTCTC TACAAATGTA AGTTAGTGTT GATAGAATTT GTTATGCGAT ATTTGGTTCT TTGGTTTCAG  
TCTCAATGCT TTCTCTTGG CATTTTCATTG ACTCTGTAAA TTAACCTCAG CATCAATTTT CTTTAAAT CAACAGTTAT  
TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTGGGG GTACACTTTA ATTGACGGGG TTCTG

SEQ ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTTTTAT TGTTCTATAG ACACTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG  
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT  
GATCAGTAAA AACATGCAAA AGTNGAAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGNTGG AATTTTCAGAA  
CAGAGGWGGC AGGGTGACA AGTACCAGGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGTTTAT TTTTATTTT ATGTATTTNA ACTGACITAT TTKGTATCC CACTAGAACA ATACATTCAC AATATACTTG  
CAGAACKTG CCTGGSGCAT CAGGGGAGCA GAGAACTTTT CCAGTGAATA GTTTTGAAG AAAGGAGTAA AATCTCCCCC  
AAACCTTAAA GGCATCCTTT T

SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACCTCTKC GCCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACC GC AACCTCCGCC TCCCAGGTTA  
AAACGACTCT MATGCCTCAG GCTCCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT  
TTWAGTAGAG ACGGGGTTTT ACTGTGCCAC ACAGGCTGGT CCCGAACTCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC  
TCAAAGTGCT GGGATCAGAG ACGTAAACCA CCATGCGGGG CCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCAAC  
CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

SEQ ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAG AAGCGGCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTTGCATAT  
CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGGTA AAGATGCTCA CGCAGCCACC AGTGCCCTG CCGTCCATAA  
GTGCACTGTG ACTTACCCTC TGAGAGTGGC ATCTGCTG

SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTGCC TATGGTGTA AATCCTTTGT TATTTTCTA AAAAAATAAA ATTTAAAAAG AAAGAAACT AAGGAAGAAC  
AAGANGCTAT TTACCCAAAG TGAGCTTCA GTTTAGTTT TGCACTGGTG TTTGACTGCC TTCCGCCCT ATGAAAATCA  
AGAAAATCTT TTTAAAAAT GGAGTCTGC TATTTTCCAC TCCTTGAGA TAATACAAAT TCAGTTTGTG AGGTTGGATG



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GTCAGTTGGG AGCTGTGATG GATCTGTGG CGGGTTTGG ATGTGTAAAG AATGATATAT ATA

SEQ ID NO:1924: (Length of Sequence = 231 Nucleotides)

GTCTCCCTG ATTCTCAACC TTGCAACCT GCCTTCCTC ACTGCTAGGT CCACGTAGGC TTAACCTTGA TCTTATATGT  
AGGACCGGTC TTCACCTTAA GCAAGAGAAA TGTAAGAAAT GNTTCCCAA CTCAGTTGCT GGCCAGCTT TGGCCTCGTG  
TTCCCTTCT GAGGACTGAC CTTTGGTATT GCTCTGGAGT CTCATATCCC CTTTGGCCCT AACTGACCAC G

SEQ ID NO:1925: (Length of Sequence = 249 Nucleotides)

GTTTTTACTT AACCATCTTA TGTGTGGGAA TGGGTTTCC ACTTTTTTNT TATAGATAGT GGTGAGTGA ACATTTTAA  
ATAGCTTTTT NCITCAGTGT AATTATTTCC NTAGAGAAAG TTACCAAGAG TGGTTTTACT AGTTCAGAGG GCTTCAGGAT  
TTTATGGCT CTINCTAGCG GTGCTCTATT ATCCINNAGA AGACTTGTAT TACTTCCAGT GTCAAGAAGG TTGCNCTTCC  
ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT  
CTGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGTCTCCCTT AGCGCTCCCA GGCTATTAG GACGAGGAAA  
TTCCCGCTTA GTAAATTTTA GTCAGACTGG TGTCTGTTC TCAAACCTG TCTCTGATA AGATGTTATC GATGACAATG  
CATGCCIGAA ACCTCATAG CAATTTAAT TTCGCCCCGT GCTCTGCCAT TTGCCTTGTG ATATTTTATT GCCTTGTGAA  
GTATGTGATC TCTGTGACCA CAACCTATTG GTACANTTCC TCCCTT

SEQ ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTTTTATGG GGGCGGATAC CGCAAGGGCC CGCCACGGT CAGGTTAGTG TTCTGCTCTT GCAGAGGCGC KACAGCCTGA  
CACCTCCACC TGCCACCGC CGGGGTTAG TGGAAATGC AAAGCTCAGA GGGTGGAGGC AGGGGTGGTC GCTGCTGAGA  
CCAGGCTGN GTGCAACAGG AGGGTCAGCA CAGAGCTGG CTGGTGTCCC TGGGCCCAA GGGGGCTGGG G

SEQ ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCTGTCT CCCCTGAGCC CAGGTATGTA ATCTCTACAC AACTGATCG AGCTGTNTG TGTGTGTATA TGTGTGTG  
TGTGTGINTT AATGTGACAT GCATGTACTG ATCCNGAGAA GCCTTTTATC CAAGAATAGA GCTGGGATCT CAAGCCCACC  
CTCCAAGAT CAGACAGCAG AGTGAACCAG GAGGCCACGA CAGGCCTTGT GTCARATGGC AGACGNTGCA GCAGGAAGCA  
GAACCACGGG ACGGGGRNCA TGGGATGCTA TKGGCAGCCA GCT

SEQ ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAT TTAATAAGTA AGGAGAGAAA GGAAAAAGAA CAAACATGGA ATATGNTCAA GCAAATAACT  
TOCAACAGAA ACAAGANGAT ATGTTTTAAA ATATATTTCC CCTGCCCAAT AGTAAACTT ATTTGAGCA CAATGCATTA  
CTGAGGTGAA ATTAAAGTTA CATAAATTG AAAACATCAC ACTGGANAAC ATTTTATGGG GCTCAACTGA AGGTGGCATA  
GTCCAGGAAG GCATTTGGAC ATGTATGGGG TGTTTCTTG TIGCCCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCCACAGAC CGGCGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT  
CTGCCAGCAC TTGAGGCCG TGCACCTGCG CACCCAGTC ACCAACAAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC  
AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCTCA TGATGTGGTG AACCACCTCA GCTGTACGA GGCCCGAAC

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CACTACGGCG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC  
GCGCAAGGTG CTGCAGGGCA CGGGGGCTGC CTGCACT

SEQ ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACTTCCC CACCCACAG GATCTGCCCC AGAGAAAGTC CTCGCTCGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA  
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCTTGCC CCACCGGGT CCTGTGCTGG NTCCTGCCCC  
TTCTGCTTT TGCAGCCAGG GGTGAGGAGG TGGCTCGGGT GTGGGCTGGA GAGGCAGAAG CCTTTCTCTG TTGGTGTCCC  
AGCACATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTGTGT TTTACCTTTT TTCCAAATAA CAGTTTGGAG  
AAATATCAAT GAAATCTGGG GGT

SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TTTCATGGGT TTTTGTITTTG TTTATTTTGA ATACTGAAAA AGTCCTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC  
CTTTCTCCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAGG ACGTACTTTT TTAAATGAT TAATGTTGAG  
TTCTCACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGCAT CTGTCGTGTC GGATGGAGTT TCTTTTATCT GACACCAGGT  
CTCCAACCAC ACTGATGCAA GGCATTTTAT CTACAGAGCT CAACTAGAAC CCCTTTTTC TTAGGCTACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCTGC GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTTGAGTTC AACCACACGG GAGAGCTGCT  
GGCCACAGGT GACAAGGGCG GCGGGTCTGT CATCTTCCAG CGGGAACCAG AGAGTAAAAA TGCGCCCCAC AGCCAGGGCG  
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCCGGA GTTTGACTAT CTCAAGAGCC TGGAGATAGA GGAGAAGATC  
AACAGATCA AGTGGCTCCC ACAGCAGAAC GCCGCCCACT CACTCCTGTT CCACCAACGA TAAACTATC AAATTATGGA  
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG  
GTAAGCCAAG GTTTTAAATGA CCAGCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCAT CACATACTYA CCTTGGGAGG  
CTGCTGCACG GGCATTCTCC YGATGCTCAC GGCATTGGK GTAGGTTTCA RGATCGCCTC TTGAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTTT TTTCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC  
ATGACCCAGT TGAGGTGGTT GTNTCCTTGA GTCTGTTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA  
ACACAAAACA CCAACAGGG ATGCACTCAA CTGTTGGTT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA  
GAAGGGGGCT ATGGTGTGTC TGCATTCACT CCGCTCACAT AAAGCCACAT GGATCTAGGG GGGGTATCCA AGAGCTCTG

SEQ ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTTTAC AAATTATACC TAATGAGTAA AATTAGTGTA AAGTGATAAC ATGCTTCTAC CTGTATTTCT AGTGACCTT  
TAGCGGCAGG TATTTATACC TGGTATTTAT GATGCAGTAT ATAAGTGGT AACAATAACT GACAGTATTG TGCTGTCTGT  
ACATGTCTGG TCTTTTGAAA CAGATTTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATCTAAT TTTATCTCTA  
GGGCAAAGTA GACAGGGATT ATTCCTTGA ATCTATTTCC AAATTAATAT TTTTCTTTT GGTATTTCTA CACTTTAAGG  
CCATTTGGTG CAATTTAGAA AGTGTGGGCC TCCCTCCGC TAGCCACATT CAAATTAAC TTCCAAAACC TCAGGAACAG  
TACAAGGAAT TTGAA

419

SEQ ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACCTCTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTC  
 TCCTGTCTCA GCCGCCCAAG TAGCTGGGAT TACAAGCACT TACCATCACG CCCAGCTAAT TTTTGTATTT TTAGTAGAGA  
 TGGGGTTTCA CCATGTTGGC CAGGCTAGTC TCAAACCTCT GACCAGCGGT GATCCACTCA CCTCGGCCCT CCAAAGTGCT  
 GGAATTACAG GCGTGAGCAC CGCGCCACG CTGINTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA  
 ATGTACCTTA TTACAAGTAG CTAAATTTC ACATAGAGGG NTAAAAAGAT TGGGGAATCA GGTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GGCCTCCCTG TCGGGTGCAA TGCAGTGGCT CAGATCATAG CTCACTGCAG TCTCGAACTC CTGAGCTCAG GCAGTCTACC  
 TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG  
 CGCCCCCTGT TAGGACAGAA CCACGGTGCC CAGAGCCAGG AAGCGGCCCT CCTGGCGCCC AGCATCTGAG CTCTACACG  
 TGATGGGGGG GCTCAGGAGA GGACAGGGAG TCGTGGTGA AGTTCCACAG CTGGCCCGGT GGGGGGGCCC TTGCACCGCA  
 CTTGCCGCTT CCTGACTGCC CCGATCCCG CAGCCCTGT GCCGGATTGC ATTTYCCTCC TTNCTYCCAG GGTACTGGCC  
 CCAGCAA

SEQ ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACCAGTT AATTTTTTGT ATTTTCAGTA GAGATGGGGT CTCACGATGC TGTCTGGGT GGTCTGAAC  
 TCCTGAGCTC AGGTGATCCA CACTTCGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCG GCTAAAAGAA  
 AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGACG TTACGTGAAA TAAGCCAGGA ACAAAGAGC  
 AAGGCTATAT GAATCCACTC ATATGAAGTA CCTCGATTAG CCAATCCAT ACAGAAAGTA GAACAGTGGT TGCCGCGGGG  
 AGGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTTTT TAGACGGAGT CTCGCTCTCT  
 TTGCCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCCC TTGCCAGGG CCTCACATGC CGGCTCCCC CAACCGGTCC TTCCCCITGG GCTGCCGGTG CAGCTGTGGG  
 CCCAGGCTTT GGCAGGCCCA GCTTCAAGAC AGTGGGACAC AGAAAACACT TTGCAGCATC GCCTCTCCCT CCGCCACACC  
 CAGGTCAGCA GAGATGGGCC CCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGGC AGGGTTGGAG AGGAATGGAG  
 AGACATGTCA CCTCTATAGA AACCGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCCGGAAA  
 GAAGAAAAGA GGAACACGGC AGGGGGTTCT KGGGGAGGAG GGCTCACAM CACCCCGCAG ATGAGCGTCT TCACCACGAA  
 GGTTCTCTC GAAGTKGCGG T

SEQ ID NO:1941: (Length of Sequence = 377 Nucleotides)

GTCAGCTCTA GAGGCACCT GCATCATGCC CACCAGGGTG ATCCCCCTGG GATNGACCAT CTCGGGATAT GAGGCCTCGG  
 AGGCTGGGGT TGAGATTGG TCTGAAGAG CTATAGCCA GATGCCACA TTCAAGTGTA AGTCCAGGAA AGGGGCAGGC  
 GGCACTGCAC AGGGATTAT CAGTTCCAGA ACCTCACAGT GATAAGAGGC TTTAGAGAGC ATCTAATCGA GACCTTTAAT  
 TTTTCGGGGA GAGCAGCTGA GGCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG  
 TGGTCCANCA CGTGTCTGT CAGTTGGAAG CAAAGGGCTT GCCCGTGATT ACCTTCC

SEQ ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAATTAAC ACATCTTTA ATAAATTC TATAGAAAGC TCAGTCATAG GGCAATACT  
 CATTTCTCTT TCCCATATCA CCGAGGATTG AGAGCTCCA ATATCTTTG GAGAATAAGC AGTAGTTTG CTGGATGTTG  
 CCAGGACTCA GAGAGATCAC CCATTTACAC ATTCAAACCA GTAGTTCCTA TTGCACATAT TAACATTACT TGCCCCTAGC

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ACCTTAAATA TATGGTACCT CAACAAATAA CTTAAAGATT TCCGTGTGGC GTGAACCATT TCAATTGAA CTAATATCCT  
TGAAAAAAT CACATTATTA CAAGTTTAA TAAATACAGT AGAGAGCTGG CATTITTTCTA AATACTGGAT TTCAGATCTG  
G

SEQ ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACCTT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG  
AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACITTTA TTTTATCTC TTTCTCTACT  
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCGTATTG TGCATCTCAT TTCCTTATGG CAACTACAAC  
AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC  
TCACTCACTC TGGCCTGCGC ACTGGGGTTG T

SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

GCCCAGGCTG TCTCAGAATC TTGATGGGGT GGTCAATTGAG CTCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG  
GCACTGGCTA CAACTCGGAC CGGCTCTGCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG  
AGCATTGGAG AGAACATCTT CCCTGAGGAT CCCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC  
CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGCGCCTAC CTCTTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT  
ATGGGTACGT GTGCATTGCT ATGGAGGCTT TGGACCAGCT GCTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTCGTG  
GAGAGC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAAATTGTG AATTNAGAA TTCTGCTATG ACAAGTGGA AATTGAGAAA AGACGCAGAG CCACITTTTG TNATCGTGTA  
GGTGACAAGG AGTCTCCCAA GTATATCTG CTAATAGGAG TAGCTCICAA AAGTTAATCT CAATAAAGCC TCCTAAAGTC  
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATTCTC CAGACTAAGC TGTATGGGGG AAGCCTACCT TTTTTCAGCC  
CGAAGTTTCA GAGACTGAGG ATGTAAGTGG GGACATGATC ATTGNITCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA  
TAGAGCTAAT CTGAGTACCG CTTAAATTCA AGAGCGGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCTCTINAC CCCAGGTTT AAGCAGTCTT CCCACCTCAG CCTCCCGGGT AACTGTTCCT TGTAACCTCTC TCATCATCGA  
GGCTATATAT TAATAGACAT GGTATTAGC CCACACGAAA CATTGAGAAT TAGAATTGGA TTAAGAAGAC GCGTTTGGC  
ATCAGCTGA CTACTCTCA TCTCGTCTT CGGGGAGGGT GATGCCAGCG TGGGACTCTT TGGGAAGCCT ATCAATCACA  
GGTGCCTAA AATCAAAAGG TGGGTCAGTA GGTTAGGGAG GNGGCGCGA AAGGAGATGC CAGCGGTGT TAAGAAGGAT  
ATGGTCAGAA GAGCTCTTTG TCTCCATCCA CGGGCCTCT GCTCAGCCCG TGTGTCTCG GTGAGTAATT CGGGAGCAGT  
GCACGGCT

SEQ ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTGACA CTGTACTAT CTGCAACAGT TCTTGAGTA GAGGATGCAC TTCAAAGTGC ACTGCTTTAC TGTCTCACTG  
GAATTCTAAA AATCTAAGCT TTATCTTTTT AACATTAAGC TGTGTGGGAA TGTAGCAACC TCCTGGGTGG TGGGGTGGG  
GGCATCTTCA ATTATTTAGG TCTCACTGGA AAGTTTGAGA TCAGAGTTTG GTAGGTGGTG TAAGGGGACA ATGAGTAAGG  
GAGAGAAAAT ACAGGACTGA CTTGGGSCAA AAAACGCCTG ATAATAATTT GTGAAGCACA TTTTCAAAC CATTATATCC  
TTACAAGGAT CCTAAGAGGC GGGTATTATG TCCNGTTAT ACCTGGAGGC TTAAATTGAA GGAACATCTN CAAGGGCACA  
CAGTTTAAAT AATGGCTGAG GTAGGA

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SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

TTACAATCTG GCTGGAAACA GATAATTAGA ACATATCAG AGAAACAGAA CAGTTAAGTG CCAAGCTCTG GTGGAGGTTT  
TAAGTGCCAG AGGTCAGGAT ATATTTTAA GTGCTTCGCT TCCAAACAT CACTCTTTCA AAACAAAACA CAAAGATCCC  
CAACCAGCAT TTCTGCCCC TGAGGCACCA GCAAGGTATA TAAACGGCT TGCAAAGTTT GATATACGGT CTCCAGCCTG  
GCTTTCTTTA GTCTGGGCTC AAAAGCCAGA AACCTCTGGG GGCCAGAGAA GCGCTCTTTG TTGCCAAAC AGCATTTCTG  
CACATCCTGT TCTACAGCAC CGTCAGTTT

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCATTCCTG ATTTTATCCC AGCTGTGGG GATAATTGATG CATTCCTTAA GGTCCCACGT CCTGATGGAA AGCCTGACAA  
CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCTTA CGGTGCTCTC ACTCTGGTTA ACAGAGAATT  
CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACAG  
TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA  
CAGCGTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCCTAACTT TACGAATGAA AGAAAACAAT TCCATCCCTC TCACAAAAG GACATCTTTT AAGCTTTCTT CCCAATCTAA  
CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCCACAG TGGTGTAGAT GCATTAATCT CCGGGGACA  
GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCACTGCCC  
CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCA GAGGGGCCAG  
TTCAGCCTTG AACACGAGT TNGGGAGTGT CTCAGCT

SEQ ID NO:1951: (Length of Sequence = 336 Nucleotides)

CTATCTCCCC AAATCTACGT TTCACCATTT GTACTGTAT TTTTTTAGCC CAAGCCACCT TTATGTCACT CCTGGAACAT  
AATAACTGCT TTCTCACTCA TCTCCTACAT TTINACCTCT TATAATACAG TCCACCTTGT ACGAGCAAC AAGAGTTATC  
TTTCTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTCTC ACTAAAAGCG AAGTCTAAAA  
TTTCCACCCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCINCGATC TTACCTATCT TCAACCTCGG  
TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGTAA TTAAATCAGC AAATGCCCCA TTTCATCTC TACCGGAAAG CTTTCAGACG CATTCCCAGA TCAGACAGAG  
GACTAGGGTT AAGGCTGGGA ATGAAACACC AGCTAGTATC CCAGTGAGCT TTCCCAAACA CACATACACA GCAAGTCAGA  
CTAAACAACG TCCAACGTGA GACTCACCTC AAATACTTAG ACCTAAGATT CAGTCCAGG CTCTTTTCTA TACACCAGGT  
AAGTAAGCAC TGGGCATTCC TATCTCAGCC ATTCACTTCA CAGAATCTTT TGGGTGCTTA CTGTGTGCCC AATACTGTGC  
TTAGTGTATC TTGCCCTCAG CAGGAAAAAA AATTAAAAGT GTTAAATGTT ATGAAGGAAC AGATTGGNAT AGGAATCACA  
AGGCATTGAG GTC

SEQ ID NO:1953: (Length of Sequence = 382 Nucleotides)

GTTTCACTCT TGTGCCCAG GCTAGAATGC AGTGGCGATC TTGGCTCACT GTAACCTCTG CCTCCCGGGT TCAAGTGATT  
CTCCTGCCCT AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGCTAA TTTTTTTGTA TTTTATAGT  
AGACAGGGTT TCGACATATT GGCCAGGCTG GTCCTGAAGT CCTGATCTCA AGTATCTGC CCACCTAGGT CTCCCAAAGT  
GCTGGGATTG CTGGCCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTTIN AATAGTGTCT CTAACCATCA TGTATAGGCG

CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTGAGGAT TCCNTGAGAT AGTGTGTTGAA AA

SEQ ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTGT TCTGTTCCC TTTGGAAGGC TGAGTGGGTG ATGCAGCACA  
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACGTG ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGINTGGGC  
TCAAGTGACC ATGCAAGTNC TGTCACCTCC TTCCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT  
CAAAACAATA ACAGAAACAC ATCAAGNTTN GCGTCACTGA AATTGAAGTT CTGAATTCTG CCGTCACCCC AGCAACAGTG  
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTGAT GTCTTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCTCAGC CTCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC  
CAGCTAATTT TTTTNCITTT TGATTTTGG TAGAGATAAG GTCTACTAT GTTGCCCAGG CTGGTCTGAA ACTCCTGGCC  
TCAAGTGATC TGCTTTAGCC TTCTGAGTAG CTAGAAGTAG TTTAATGAC CNAAGAATT ATGTGTTTAC CNGTGATTTT  
ATGTGTTTGG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GGCGCGTTCC TCCGCTGTC GATCTGGAAC ATCTTCTCGC CAACAAAGAG  
CAGGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCTGGAGATG AGCGGCTTGT  
TGCGGCGGTA CGGTTTCTC AGCAGCAGGG TCTCCGTGGG CGGCTCAGTG GCCAGTGCCA GCNAGGCAA CGTGTCATG  
ATGAGGTICA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCTGCGT GATGCAGGCG CCTNTAAAGC CACAATCAG  
GCCACCACGT TGACGGTGAA GCTGGAAGTT CAAGAATTIN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTTT CTTTTTAGC CTGTTGATGT GGTAATTGT ACTGATTGAT ATTTGAATAT TAACTGGCT TTGCATCCCT  
AGAATATAAC TCACCAGGTC ACTGTGTAAT AGGTTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCATT  
AAAACTAGGC TCAACACAT CTGTATTAAAT CAAAGTAAGA ACCATTACAA TCAACACAAT TTTGCCAACA AGAAATAAGT  
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAAGTT TTGNAAGCA CTTTCTGCAT CCTGCTGGTT  
GTGGAAGC

SEQ ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATTTAAGTTA AACAAATTTT AAGGATGGTT TCCATCTATA AAATGGACAA AGTACAAGCT  
CTGTACAGCA GTTCTTTTAA AAAATCAACT GGAAAAAATA ATTACCAAAC TATATTTTGA ATTTGCAAAA CATACTCACA  
GATACCATCA TCTGAGCTTT TATGAGGNCA TAAGAAAGGN CCACCACAGA GAAGACAAGT AACTTGGGCA CGCTTTGCTC  
GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAATACGAG AAAAATCACA ACAGAGTAAT AAAGATATAA AACTTTTACA ATTAACACTC ATCAGTGTGA TAACTAAGC  
CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAAACGTCT TTACTTTTAC TAAGAAGGAA CTGAAATTAA AGTCCTTAGT  
CACTTTGGAG GTGGCTGCAA AAGCTCACAA CATAGTTGAT CCTTAAATA ATTATGAATG GCAACCAGTG CTGCCTTCT  
GTAATCAACC ATGCAACTG

SEQ ID NO:1960: (Length of Sequence = 329 Nucleotides)

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GACTACAGGT GTGCCCCACG ATGCCTGGCT AATTTTTAAG GTTTTTGTAG AGATGGGGTC TTCTATCTT GCACAGACTG  
GTGTGGAATT CCTAGCTCAA GCAATTTTCC TGCTCAGCC TCACAAAGTG CTGGTATTAC CCGTGTGAGC CACCGTGTCT  
AGCCCACTCA TGTATTTCTA ATTATTGTAT TTGTGAAC TAATATGAAC AACAAAAACA AACAAACAAA CAAAAAGGGT  
GGCATTTCG GGCACACAGG GAAGGTGGGA TTGGGGTTC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCCAGTTAG  
AGCGCTATC

SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCAC CTCAGCTCC CAAAGTGGTG AGATTACAGG NTCAGCCAT CGCACCCGGC CCAATTATTC TTTCTAAACC  
ATTTCCTCTT CTGTGTTCAT GCCTTTAAAA ATAAATTA AAAAAAAAAA AAAAAAATC CTTAAATTT CTCAGGTGTT  
TTCCATATCA TTTTATATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAAC TACA AAACATGCAT  
ATTATAGGCT ACACTGAGGG ATTTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TGCTGGTGTG CTGTCTGCA TCTCAGGAG GCCAAATCAG TCCCAGCCTC TCCCACCATC TTCCCTGCAG CGATTTCTTC  
GAGCTCGAAA CATCTCTGGC GTTGTCTGG CTGACCACTC TGGTGCCCTC CATAACAAAT ATTACCAGAG TATTTACGAC  
ACTGTGAGA ACATTATGT GAGCTATCCC GAATGGCTGA GCCCTGAAGA GGACCTGAAC TTGTAAACAG ACACTGCCAA  
GGCCCTGGCA GATGTGCCA CCGTGTCTGG ACGTGTCTG TATGAGCTTG CAGGAGGAAC CAACTTCAGC GACACAGTTC  
AGGCTGAT

SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCGTC TCTTTCTGGC TGCTTGTGCT  
GAGAAGTAT TTNAACCCC GAGGTTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTTGTTA AAAGGCAAAT TTTCTGCTGG  
GGACTGGCTT TACCCCGTCT ACCTAAATCA TTCTTACTG CCTCTGTAA CAGTCGCCTT TTGTGTCTG CTGGNATTTG  
TTTGAACACA GTCCACAGGT TCAGTGGTTN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TTTTAATTC AAGCAGAGTC CCCCTCCCC AGCATGGTCA CACACACAGT GGAAAGGGAT GTCAGGGTCT  
GGGAGGAGC AATACCCAGA CTTGGGCAA AATATAGATA TCATTATATA CACACGTGGA CTGGAAAGAA GTCAAGCTGG  
GGGTGTAAGG TAGGGCAGGG GCAGGTGAGG AAAGCAGCTG GGGGGGCCCC AATAAATTAC ATTCTTGAGA

SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CGCGTGGAT CCGAGAAGG CACAGCAGAT GCGCTTCCAG GTGCATACCC ACCTTCAAGT GATTGAGGAG AGGGTGAATC  
AGAGCCTGGG CTGTCTGAC CAGAACCCCC ACCTGGCTCA GGAGCTGGG CCCCAAATCC AGGAACCTCT CCACTCTGAA  
CACCTGGGTC CAGTGAATT GGAAGCCCT GCGCTGGG GCAGCAGCGA GGACAAGGT GGGCTGCAGC CTCCAGATTC  
CAAGGATGCA GACACCCCA TGACCTTCC AAAAGGTCC ACAGAACAAG ATGCTNCAT

SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GTCCCTGCAC ATGCGTCTGG CAAGACGGT CAGCTTTGTG GTCTGAAGCA GGAAAGTTTG TCTGTNCTTA GCCAGTAGCT  
TGCCCTGTT GCGCTGGT GTGTAAAGAG AGAGACTTTG AGCTTCAGGT CTGGATAAAT NACCCCTTGA GTGTGGCTCC  
GTGGTGCCCC GAGTGGCCCC CTCAAGCTGA GTGGGGTCT TCAGTCCCC ATACTTCTTC CAGTAGATCC AACAGGAAGC  
ACAGAGGCGG CACTGCATGT TAGGTGGGCC CCAGGCATAC CACTGAGCAG ACTGTGTGGT GTGGCACTC TCACAAGTCA

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SEQ ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACCTGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC  
CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCCTTCCCTT CCGCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA  
GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTC CTCTGTTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA  
CAACAACAAA ATAACATGTT TGCTGTAA GTGTATAAA AGTAGGTGAT TCTGTA

SEQ ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CTCCTCCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTTTAAGAG GTGTCCAG GACTTTTGGG  
ACCTACTAAA ACAATGATGG TTATTTTAGA TGTGATGATT TATATTTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT  
CGATACAAA ATCAGGAGCA TCTTGGGATT TATTAAATTA TGTAAGAAGA TAGCACAGAT ATCGGGATAT TATTGTGTGA  
AAATGCTGCT TTTACTTTGA TGTGATCTCA TTGATGTACA CAACCAAGT CCAATAAAGT GCTAGAATGT G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCTGATAC ATGCAATATG GGTAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA  
ACACAAGAGA ACATGTTGTT ATGATTTTAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA  
AATCAGTAAC TGCTGACAGG GGCAAAATGAG GNGATGATCT CAAGGGNACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG  
ATCGNATTGG TGGTCACACA AGTGAA

SEQ ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTG AGGCCAGGAG GCGGAGGTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC  
AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAA AAAAATGAGC TAAATACAAG AGATGTAAT GCAGGAAATG  
AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCCTGTCT  
GCCTTCCTTC CCGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTCATCCTC CTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATACTG CTGAGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT  
CATTTTGAAT ATAACCTAGT TCTAATAGTC AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCCTCGGA  
AGCAAGCTTT CAATGTCCC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG  
TATTACTTAT TACCATTAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TTTACCTGAG AAGAAACCAG GAGGCTTCTT CTCTCTCTTC TCTCTCTTTT TTTTTTTTTT  
TTTTTGACTA TACAGAAGAA AACTATCAGA GTTAGGTTAG AGAGTTGGGT TTGGGGTCAG GTGTAGCAT GTGTTATATT  
ATGGGTAAA TTGTGCTCT CCCAAATTA ATATGTTGAA GTCTTAACTC OCTGTACCTC AGAATGTGAC CNCATGGGGA  
AATAAGGTCA TTGCAATATA ATTAGGTAAA ATAAGGTCAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCGCAGT CATCTCAGC ACTACACGCA GGCCATNINC AAGCTGACCG CAATGCTCAT TAGCAGTAAA GATTGTNACC  
CGCAGCTCCT TCATCATCTG TNCCTGGGTC CCCTCGGAT GTTCAATGAG CATGGCATGG AGACGGCCCT GGCTGCTGG  
GAGTGGCTGC TGGCTGGCAA GGATGGAGTG GAAGTGCCGT TNATGCGGGA GATGGCAGGG GCCTGGCACA TGACGGTGEN  
GCA



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SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATGACGTCA TGGGGTGAC CAAGGGCAAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC  
TGCCCOGCAA GACCCACOGA GGCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTGCTGTAGC CTTCTCTGTG  
GCACGCGCTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTATATAAG ATTGGCCAGG GCTACCTTAT  
CAAGGACGGC AAGCTGATCA AGAACAATGC CTCCACTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCITGGA CCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTTCTCT GCTGCAACCT ACCAGATCTG  
ACATCCACCT CCCCCAGCAC CCATGGGCCA AGGAGGCTG GGGCAGCCAA GGGGAGTCC AGGACCAAGC AAGCAAGAAA  
CCGTCTTTG AACACATGGT TAAGCTTCTT CCAGCATGGC CCTAATTCCT CTACCTGCCT AAGCCAGGGG AGT

SEQ ID NO:1976: (Length of Sequence = 162 Nucleotides)

AAGTGTACA AGCCCCAGAA TGCTGCCCGG CCTGCCCTGC TGGGCGGACT GTCTGTGTGT CTGINTCTCT GGGTTCAC  
CTCCAAGCCT ATACCAGCTG TGTACAGCGC CATCTCTCTG CCTTCTGTG CCCCTCACTC ACCAAACAG TGTATTTATA  
GC

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCAG GCCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG  
CATTAGGTGT TGTGTGAGT GGCTGTGATT TCTTCTCTGC AGGGGGAGTG GCATCTCTCT GAGCAGCTAC GTTGCTCTGA  
CGTTTGAGGG GGATGGGTTT AAGGTTGTAC TTGTCAAGAA CCACCACTGT GCTGGCATTG TTCTTCACAG GCACCAAGGA  
TGGTGTCTCC AGCTCTAGTC CAGTGAACG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTGCAGGAGT TGCTGATATT TATTCAAAG TCATCCATAC AATAAAGAAC TCTNCTTTTA AAATTCCATT TACATCAGCA  
GTAAATAAAA AGTGACAGTG GATGAACAT GANGCTGTAA AGTGCCCTTA TGGGGAATNC AGCCACGCCT GCCTCCACTG  
TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGCT ATGTACTATA CTCAGAAAA CCATTTATTT GCACTGGAGG CAACTGTCTT TGAGAGAGGA  
AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTTINACTA AATCAGTATG  
AGAATCCTGA TTCTTCATTA TTATATCCCC AACACTCTAT CAGTTTGTG AACAAATCAA CAAATAAGCT TGAATAAAGG  
NCCACATCT CAATTCTCTT CCACCATCTT ATATTGCCCT TCATCCCTAC ATTAAATGN TTATTTCTGC TTTTCTCTT  
TAACAATTTA TCCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTATCT CACAGTTTAT ATTTCAITCA  
TTTATATTAT TTTTITAAAA GGTTCCTTA TCAGCTACTA AACATCTCAG CAATTGGTG TGCATAGCTC TAGATTAAAGC  
AACAAAGAAT TGTA

SEQ ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGGNTCACTC ATAAGTTTC AGTGGTAAAT TACTACAGTT TAAGAAGACG TGTGATTAT TTTAGATCT GACCCAGCAG  
ATCATACCIN TNCNTGAAT TACATGGTCT TCTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCTT

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CAAGCCCCCT TTGCTAGCTC TTCCTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG TTTTCACCCC  
CTNCCNGGGT GACCGTATA CTNCCAAACC TACAGG

SEQ ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTGTGNTCC AGGAGCAGGC TTCCCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA  
TCCAGGTTGT GCACAATCTC ATCCGACATG CGTGTNTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC  
CTGGTGAGAA ATGGAGCAGG TGATTTGAAG ATCAGGGAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC  
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TTTCAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TTTCGTCTCG CTTCCTGTC TCTCATATCT  
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCTGTGGCTT TAGGCATCTT TAGTAAAAA GCTGAACAAA TCCCAAATTT  
ATTCCCATTT TCTTGAGAAA TAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT  
AATTTTATG TAAGTATACT GAATAACAT ACA

SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGGCTG CTCTGGCCTG GGACACCCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC  
CCTGTGGGAG TNCGGGGGCA GTGACTGGAA TGTNCTGCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG  
TGCAGCGCAN CTCATGGGTG CCCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCCG T

SEQ ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTGTTGCTT GGCTACAGC AAGTNATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG  
CTGCAATTCT ATTGGTGGTT TTCCCCAAC AGCAATAACA AGATGTTACC TGAAGCACA CCAGAGCCAA TCATGACTCA  
GGCCTGTCTA GATGTTAGA TGCTGGAAA TATATTT

SEQ ID NO:1986: (Length of Sequence = 268 Nucleotides)

CAC TTGGACA TTCCTCTTA TTGTTACAT TCCAACCCAG CACAGTCACA TGCACACAG GAGATCAGAA ACCTTTNGGC  
CACAGCCCCA GGAGCCCGGC GGGGGGGAGG GCGGGACCGA CAGGGGCGGG GCGGGGCGGT GGAAGACTCC TCCTACCGAG  
CCTCCAGGC GNTCGCGTT TGCATAAACA AGAGAGCTGG AGAGGNTGCC CTCAACAGTG CGCTGGGGAA AGGGGAGGGA  
ACGTGACAGG CAGGTNINGG ATAGGGAC

SEQ ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCTCACTG TAAACAAATG AGGATGGAGG AACTGAGAG GNTCAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC  
GTCTACTCT GTAAAGAGCA TGA TACTCA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTAAACAAAT ACTTAGTCCC  
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA  
TGTATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

GTGAGGGGGT TCGGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAGGTTT AGTGATTAACT TTGGATCCAT CCCATGCTGT  
CTTGAAGTGT TCAGGAATGG GAAATCTCT ATAATCAACA TCTGAGGGA TAAGTATGTT CATTTAGAT GACTTGGCGC  
TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG

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SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG  
 GACATTCAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCA GGGCCCGGAC TCCTGGGTGT GGTCA TGAGA  
 AGCGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCCGATGGA CCAGTTTATT GGATTCACCT ATGATACCAG GACTTTTCCA TTCAATTCAA  
 TTCAACAAAC TTTTAGAGAT CGCCCTATT CCAAGCTCAT CCAGTTCTG CTTCATGAAG GCAGGCTTTG GCATATCAGA  
 CATAAAAAGC TGGAGGAACT TGAGGATTCT TTTGTGGGTA AGTATATAAA GTGCATTCCC ACT

SEQ ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCAGT TCGTGTTC TGCAGCTCTA CCATTCCCCC TTCTTTGGCG ACGAGTCAAA  
 CAAGCCAATC CTGCTGCCCA ATGAGTCACA GTCCTTTGAG CGGTGGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA  
 CCCACAAGAT CGCCGTCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCCAATGA GCATGGCTCC  
 TACAGGTACA CGGAGTTCCT GACGGGCTG GCGCGCTCA TCGAGCTGAA GGA CTNCCAG CCGGACAAGG TGTACCTGGG  
 AGGCCTTGAC GTNTGTINGTT AGGACGGCCA GTTCAACTAC TNCINGCAG ATGACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GGCTTACAGG ACAGAAAGGT CCCTCTCAC AGTTTGGGAG GTCCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC  
 CCTCTGGATG CTCAGGGGA GGGTCTTTG CCTCTTCCAG TTCTGGTGGC TCCAGGCATT CCTTCTTTA TGGTGGCATC  
 ATTCACTCTT GCTCGTCTT CAGTGGCCT TCTCTGTGT GTCAAAATCT CTCTCTGT CTCTGTGAAA AACACTGTCT  
 ATTTGGGATT AGGNCACC CCAATCTAGA TGGTCTATC TTGAGCCTT ACTTAGTTA CCTCTGAAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TCGACGAGGA GAAGACCTT TCATGTGTAT GGACATACAG CTCGTGAAG CACTGTGTGG CTTCAGAAG  
 CCAATATCTA CTCTGACAA CCGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG  
 TGTACTAAAT GAAGGCATGC CAATTTATCG TAGACCATAT GAAAAGGGTC GCCTAATCAT CGAATTTAAG GTAACTTTT  
 CTGAGAATGG CTTCTCTCT CCGTATAAAC TGTCTTNT GGA AAACTC CTACCCGAGA GGAAGGAAGG GAAGAGACTN  
 ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTTNGATCCC AATCAGGAAA GACGCGNCA CTNCAATGGG GGAAGCATAT  
 GAGGGATGAT GGACCATCAT CCCAGAGGT

SEQ ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTTGCC AAACCAAGTT CCCCTGTCCT GTGTCAGCCA GCTGTGGCAA TTTACCCCTT ATTCCTTGA GAGGCCAGCT  
 GCCTGCTGGA AGGAGTCAGA AGTCGGTGA TGTCAATTGAG GCCTTGGAGG CCCCAJINTG GCGGGAGAGA AATCCACACC  
 TGTGCTGGA GTTCTCCTTC CCGTACCCCT TGAACCGCG CTTAAATGC TGTCCCGCT GGAACAGGA GGCCACATCC  
 AGCAGTGGT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CCGTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT  
 GATCATGCCA TCCCCATGA AGATATAAGA AACANCATAA CCATGGTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCTATAT GGCCATGCTC TGGCTTACC CTGTGGGAAGC CTGATCCCGG TGTGTGGCCC AGCTTGTTC GGGCCTGGGA  
 TGCTGCATCT CCAGGCAACT ATGCATTTT CCGGGGAGAG AACCAGTATG AGAAGTGGGG GCAGGGCACA CATTATCTT  
 TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCTCCAC GTCTGAGGCC CCGCCAGCTG GCGTCTGTCT

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CTCGCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCCGAAACCC CACCTGGAAG TTTCCCGTG  
ACAGTGCGTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCATATGGTT GGTGAACAGT TTTGCAGCCC TAGGCTCCTG TACTGTGCGT GCACGCGCGC CCGGGCAGCC GCTGGCTCCA  
GCTCAGAAA CAGCCCGGG CGCCGCGCG CTCTGAGTCC AGCCTCCTAC TGAGAACAGT CCTCCCTTG TCGGGTGGC  
ACGGCTAGCC GCAGGTTCCG CCACGTCAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC  
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGCGC TGGAGATTCG TGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGTTTAT GTTTTATTT ATGTATTTTA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTCAC AATATACTTG  
CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGNGTAA AATCTCCCC  
AAACCCATAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA  
AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGNTCTCT

SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TTTGATGCTA TGGCGCTGGA CCCAGGGCCC TCCCAGGCCA TCTCTGTTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA  
AAGGGAGTCA GCGCATTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTTG CCAAGAAAT TTCCCTGTTT  
GGAAAGTTTG CCCAGCTTT CCCGGGCACA CCACCTTTTG TCCCAGTGT CTGCCGGTCG ACCAATCTGC CTGCCACACA  
TTGACCAAGC CAGACCCGGT TCACCCAGCT CGAGGATCCC AGGTTGAAGA GTGGCCCTT GAGGCCCTGG AAAGACCAAT  
CACTGGACTT CTTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

SEQ ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACAGCT GAATCAATCT TCATATAATG CCATTTTTCG TTAAGAAT GCCAGACTTG  
GGCATTAGGC TGACATTTTC TTGAAACAG TGAGGCTTGG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA  
AGTTCTAGA TTTTAAGCAA AAATTTTAGA AAGCTGTAT CAGCTGCTGT AAGTATATAA TGAAATCTGT CATTATTGA  
TTATCTGCAT AACTGAGTCA GTATTTCCAA ATGATCAATG CATAGTATTA TAAAATCAT ACATGGGTAA GAAATCTTTA  
CAAAGTGTCA GCTAGAC

SEQ ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGTAGCCCC CTGCTGCAA GGTGCCATCT TTTTNTGCT GCTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG  
NNTCATCATG GGAAGCCCA CAGCCACTGA CATCATGAAG CCCACACGGA GCATCTCGT CACCAGGTG GAGGGAAAGT  
GCATGAGCAC GTTGGCCGGC CGTGGCCTCG GTGAAGCTGA CGTAGCGAA AAACCCACC ATGACGTAGG AAGGTGGTGA  
CCACATTAAG GGAGGAAGCA AATATGGAGC TCATGGTTT CACTTGACGG GCTCATCCAG GCTGTCTAG GTGGGCAGCA  
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGG TTTGGTAGGC TCCAGGATT TCCCTCAGCA GGCATTGTG CTGCCGAGG GCCGTCTGGG TGCCCCGAG  
GTCTCTCTG ATGCTCTGTA GCCTGCGGTG GAACGACTCC CTCCTGACT GTGTGGCAA GCTGAGCTCT GCCCTGACC  
ATGTGGCATT GGCCAGGATG GGGGCCANGC CCTGTGGGAT GCTTTGCTC CGTNTCTCTG AGGCACCGAC TGCTCTCTCT  
CCCAGTGTCC CCAAGTGCTT CCTCAGAGAC TCAACCTGGN TCCAGAACTC ACCATCCACT AGGACCTT

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SEQ ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAAG CCCCTGTCC CTCTCCACT GCCCTCTTT CCAGACAGTA AAGGCCATGG TCAGTGTGTT  
 TTTCTCTGT AAACAAACCC CAGCTGTGTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC  
 CAGGGTTTTT CTGGGGGTTT ATCACCAGTG TGGGTCCCTT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGGGGAA  
 GG

SEQ ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGGNAC ACTTTTACAC TNCTGGTGGG  
 NGTGTAAACT AATACAACCA CTGTGGAAAA CAGTGTGGCG NTTCGTTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA  
 GCAATCCAC TACTGGGTAT CTACCCNNA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACAGG TTTATAGCAG  
 CACAATTTGC AATTGCAAAA AATATGGGGC CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT  
 ATATATAT

SEQ ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCTTTTTA TTATTGINTT TTTTITTTTT TAANCAAGG TCCCTIACCT GTCTGCTTC CATGAGTAGC CGTGACCAGG  
 GGAAAGGGA GAGGAACCAG CCGGCACAGG GAGGGGTCAT CTCCACAACA TTCCATTTAT ACACAGAACT AAACAGACAA  
 GCACAGNTC ACTATTGCGG TTAGAAGTTG GCAGCATGGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

CCGGGACACC GTGGGGAAGG GGTGCAGGTG GGTGATGGC CAGAGGAATG ATGGGCTTTT NITCTGAGGG GTGTCCGAGA  
 GGCTGGTGTA TGCACCTCTC ACGGACCCCA TGTGGATCT TTCTCCCTTT CTCTCTCTCT TTTTCTCTTC ACATCTCCCC  
 CATAGCACCC TGCCCTCATG GGACCTGCCC TCCCTCAGCC GTCAGCCATC AGCCATGGCC CTCCAGTGC CTCTAGCCC  
 C

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CCTTGTGAGT GGGCCTTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA  
 CCTAATGGAT TAAGGCCATC CTCGCTAGG TCACCTACTA AAGATCAGGT CATATGTTCAT ATCGTTCTTG TGCTTTTTAG  
 AACGTATTTG GGAATGGGTT CCAGATTTTT TTTAAACACA TATTAAAGAT TATTTATATT ATGCTTTGTT TCCGAAAGGT  
 TTTAAGGTGG ATTAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCTTCTGTC GGAGGCAGGT GGAGCACAGG GAGGGCTCCT GGGAGGCACA GGAGTGGGGT GGGGGCCAGG  
 AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGGCC GGGCCCAAGC CCACCTCAAG AGGGGGGCG CCTCTCAGG  
 AGGNATCAAG GTGCAATCCA GTCTTCTTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC  
 TTCTTTCTGG ATGCTAACCC CAAATCOGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGTCTINTGG GCCCACATGG  
 AAGGTGCAGG GTCTGGGTCC CTGGATGACG AGGTGAGGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG  
 GGACTCATGG AGGATINGG

SEQ ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTTCTGGA GAAATAATA CGCTCGTCC TCTAATTAGC CCATCGGTTT CAGGTTTCATC ACTCTGCTAT CTCTCTCTGG  
 AGTTTACACA AGCCCTTCAG AGTGTAAACA CCGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAGAACT  
 GTTTCACAG ACAGGTGTTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTCTATAC GGTAAAGCAT CTACCCCTCA

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GCTGCCAGGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA  
TTACAAGCAA TTACTTCAAT GGTAAAGTCT CCAGTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCTGCCACCA CGCCTGGCTA GTTTTGTAT TTTTAGTAGA GACGATGTTT CACCATGTTG ACCAGGCTGG  
TCTCGAACTC TTGACCTCAA GTGATCCACT CGCTTGGGCC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC ACCTGTGCCC  
AGCCTCACAG CTGCATCTTA ACCTTACCTT TGCCTCTGCC TCTCAAGCTG GTACCTCCTA ATTTACATCC TAAGAGTGGA  
ACCATGTGAC AAGGACTGGA GTGCCATTGG CTGTGGACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTCAGGGG  
CAACCAAAGG AGAGAATTAC GTACTTGTG AGTACAACT GCACCAAGCC CTGGAGACCC ATTACCAACC TTAACCTCA  
ATACAGCTCT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGGTG GAGGGTNCCT NTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTTGTGAGA GGTGAGTCTT GGTACCCAGC ACGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGCCC  
TCTCTGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCTCTG TGATACAACG T

SEQ ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGGC CACCTACAAG CAGAAAGGAG GCCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC  
TGCAGCAATT CTGTGAGAA AGGGAGGGCA AGCTGCCAGA GCANTGTNGC CCAATATGAT GCCTACACGA GACAGATGTC  
CCCAGTAGAG TGTGTTCACT GACCTTCTAA AC

SEQ ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGGTACT TCACGGACAT CATCAAGTGC CGGTGATCA ACACATCCCA CCTGAGCATC  
CACAAGACGT GGGAGGAGGC CCGGCTGCAT GGCGCTGGA CGCTGCATGA GGACCCGCGA CAGAACCAGG GTGGCGGCTG  
CATCAACCAC AAGGACACCT TCTTCCAGAA CCCACAGTAC ATCTTGAAG TCAAGAAGCC AGAAGATGAA GTCTGATCT  
GCATCCAGCA GCGGCCAAAG CGGTCTACGC GCGGGAGGG CAAGGGTGAG AACCTGGNCA TTGGCTTTGA CATCTACAAG  
GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTTTATGG AAAAAAATTT CCATTTTNTT TAAGAAATAA GGAGTTTNTG TGTGAGGGC ATGACTACGA GAGGCTGGAA  
GCTTCCAACA GAGATGCTG AACGANTTCC CCCATGCCAT CGCCATGCAG CACGCAACC AGCCCGATGA GACCATCTTC  
CAGGCAGAAG CTCAGTATTT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEQ ID NO:2014: (Length of Sequence = 333 Nucleotides)

GTAAATAAA ACAGCAAATT CTAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CTGTGCAACT  
TTAAATTATA CCAAGTAAAG TACACCACCT ATTCACTGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG  
ATATTTTGA TATTAAAAA AAGGACATTC ACTATTGTAG CCCTGACAAC TCTTCCAGTA TTTTAAACCA TTCAGATGTA  
TTATGTGGG ATATTATTA ACATAATTIN GTTAAACACA TTTCTTTCTA CACAACTGA ATTTTAAAG TGTCTATAAC  
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

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NCACCACTTA TTGCTTCAA ACATTATTGC ACTTTAACTT TCTTAATTTG ACAAAGCATT CAAGAAACAT CTGCAGACTA  
 GTTTTAACAG ACAAATAACA CCTGTAAGCA GACATGACTG TCCTAAATTG TTTATTAAGA AAGTTAAAGN GCAATAATGT  
 TTGAAGACAA TAAGTGGTG

SEQ ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTCCCTCC CCAGAGATGC TTTATTACAT GGTTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG  
 GAACATCTGT GTGGTACATG GCACTGTTCC CCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGCTTGG  
 CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA  
 GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

CGCGTGCTGG CGCGCTGTG GCGCGCTGC TGTGCGNCC CAGNCTCCTC GTGSCCCTGG ATATCTGTTC CAAAAACCCC  
 TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGGGAGGAGA TGCTTTCCCC TGTACACCT GCACGTGCCT  
 TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC  
 AGATGCGCGC CTCATCTGTG CGTGTGACCT TCTTNGGNTT GCAGCATTTG GTCCCGGAGC TGGCCCGCCT GAACCGCGCA  
 GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCTTGGTTC CAGGTGAAAT TNCINCGGAG GGATNTGGGT  
 AACANNITIT GTTACGAAGG GTGCCANCCG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT  
 TGENAGGAIN CENITTTNCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGTA GGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA  
 CTAGCTGTGG AGGTCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCCATTTT TTTCTTCCCT AAGACCCCTG  
 TATTTGINTT ATTTCTGCC TTTCCGAGTC CTGCAGTGGG CTGCCCTGTA CCTTGAACCT CATGAGCCTC TAAGGGAAAG  
 GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCAGN CTTACTGGGT  
 CCTTANCTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCT TTGAACATAT TGCTGCTGTT TTCATTTTAA AAAGGAACCT TTAATACTAA AATTATAGGA AGAACATAAT  
 ATCTGACGTC ACGTAAATTC AGATTGAAG GAAATTTACT TTTTNCCTT ATTIGINCIT ATTTTTCCTC ATTTTGTAA  
 GAACCAGCGA ACACTTTGAA GAAAGCCAAA AGTTTACATC TGGAGCTGGA GGGTTCGTG ACTGCACACC AGGCACTCTG  
 CCAGCCCTAC TTCTGCCTGT AGTCTGCAG GTCACTTGCC AGAGGTGGTA CTTTC

SEQ ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACIT AAGTTTCACA AGGAAAGTGG TCACTTTAGT TCACCACITT CTTGTGAAA CTTAAGTCC AATGGGAGAA  
 TGACAGTAAA CAGACAACTA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGINAGATT TNCAAATCTG TAGAGAAACN  
 TNGGCTCATT CAATAAAAT TTTGAAACCA TTGATTATG TCTTAATAAC TATATGT

SEQ ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTTCTTA AAACAACAGC AACGTGATCT TGCTGTCTG TCATGTGTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA  
 GGTTTAACAG TTGTGTGTC TGGNGGGATT TTCTTACAGC GAAGACTTGA GTTCTCCAA GTCCAGAAC CCCAAGAATG  
 GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

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CCACGCGGCT NGTAGTGACG CCTTCTGTGA CCCGCTNTG GTAAGTCCAG CCTTCCAGG GCTGCTGAGG GCTGCCTCTT  
GACAGTGACG TCTTATCGAG ACCCAACGGC TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGGCAGTGC CTGCNCTGGG  
AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATAACT ATGAAAGGAT TTTATATTG CACAGCATTT GGTTCCTGA  
TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCAGTAAA ATATTCAGGA TGG

SEQ ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCCTAAG TTTGCACTTT ACAAACCAC AAGGGAGAAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG  
GGATGGTAAA GAGGGGAAGA GGAAGACCCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC  
CTCAGGCTAG CCCAGCAGGG TTCTGTGTG CTGGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC  
TCTAGAGACT GCCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCTGT GCCC

SEQ ID NO:2024: (Length of Sequence = 234 Nucleotides)

ATTTTGTGCG GGTTCGAAAC GTCTTCTGC CTGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT  
TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TTNGTGCTGT TCATGTTTAA ACTGCAGAGA  
CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTG AGCACCTGGA GCAT

SEQ ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GTTAAAGGGT AAGATAATTT CCCTGCAAAA GGACACAGAA GGCAGTCTTA AGAAGATGAA TGGATGAGAG  
AAGGGAGAGA ATAAATGCA ATAACGAGCC AGCATTTACT ATGTATTINN TCCTCACCTG TCTCTCCATA TTTAGGTCAC  
TTACCAGTTT CTGTGCCCTT TTGGAGCTTT TTTGAGGGC TTCATTCTCA CCCTGTATTT CTTTAGCCCT AAATTGACAC  
TCTCTCAAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAGGGCT  
AGTGTTG

SEQ ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TTTAAAGAA ACAGCTAAT GAAATACAAG TCAGTTTATT TGATATTCAG CCTACAGCTT TCCAAAGCAG  
CAGTTGAACA TGTGTGTGAG TTTATACCAT TCAATCATTC ATTTATTTTT NCTTCTTTC TTTGAGAAA TACTGGGTGT  
TTGATATTTG TTTCACTGTG CTAGTTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT  
TACAATAATT ATTTGTATT GTAAATTAAC AATTGCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGGCAC  
TGCCTTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGG AAGCTGTGTG CACGCGGTG GAGGGTNCN TTGGAGCTGA CCGGGCCCTT  
ACCTTCTCCT GCTGTGCTG GGTGAGTCT GGTACCCAGC ACGGTGGCT CCGGAGGCT TTGATAGGTC AGCCTTTGCT  
GCCTCCAGC TCAGGCTCC TCCAAGGAAC CTGCGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNCC  
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTTCTC GTGATAC

SEQ ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTTCT GCATTAACCT AGAGTTAAAA AGGAATATTG TTTATTGTTT GGCTCTCCCC ACTAGAAGTT TCACAGGNGC  
ACAGATCATA TCTACCATTT GAACAGCTCT CTGCCTGATG GCTAATACAT TINTTGGCAT ATAGTAGGTA GTGCTCAAT



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AAATTNNTTA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTNCTAT TAGGATTAA TAAACAAAG TGATCTTAG  
AGAAACAAAT CTCCCATCA ACATGCTATA CT

SEQ ID NO:2029: (Length of Sequence = 261 Nucleotides)

ATTTCTACTA AAANTACAAA AAATTAGCCA GCGTGGTGG TTGTGCACCT ATAATCCCAA CTACTCGGGA GGCTGAAGCA  
GGACAATTGC TTGAACCCAG GAGGTGGAGG CTGCAGTGGG CTGAGATCGC ACCATTGCAC TCCACCTTGG GCAACAAGAG  
GGAAACTCCG TCTCAAAAAA ACAAAACAAA ACAAAACAAA AACAAAGTC AAGTGCTTAC ATTTTGCCAG AAGCCACAA  
TGAAGACTGT GCCTTATAGG C

SEQ ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTTGCACAG GCGTTTCTGA CCTGTGGGC  
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCACGT AGGACAGGT CACAAAGCCT GGGTTTGTCT CTGGTACTT  
TGCGCCTCTG GGGTGCTAGA GGTGGGCAT GGTGGCTGGA AGTAAACTG CCAACTCTGG CCCTCAGAAC TCTCAGGTAT  
AGAAGCCCAA GATGTCTAAT ACCCTNTCCC AGTGCCCGAG AGCTGCCTGG TGTAGGTAG AGAGGACACT GTACCTGGGT  
GAATGATCAG ACCCTGGTAG CTAAGAAGN ACTTGTCCCT TTAGTCAGTT TGCAGANCCC CTTT

SEQ ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCAGAGAG AGAAGCCACT GTTGCCAGGA CAGACGCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT  
GGACCAGGGA CAGACTCACT CTGTGGAGAC ACCATACGGC TCTNTCACTT TCACTGTCTA TGGCACCCCC AAACCCAAAC  
GCCAGCGAT CCTTACCTAC CACGATGTGG GACTCAACTA TAAATCTTGC TTCCAGCCAC TGTTCAGTT CGAGGACATG  
CAGGAAATCA TTCAGAACTT T

SEQ ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGCAAG GCGTCTGGTT CTTCGGGGA AACGTCACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC  
CCACCTCGAC CACGAGCAC CACAAGCCAG GTCACCCAG CAGAGGAAA GGATGGACAC AGCCCCATGT CCAAAGGCCT  
AGTCAATGGA CTCAAGGCAG GACCAATGGC CTTGAGTTCC AAGGCGAGCT CTGGTGCCCC TGTATATGTG GNTCTCGCCT  
ACATCCCGAA TCATTGCAGT GGCAAGACTG CTGACCTTGA CTTCTTCCGT CGAGTGCGTG CATCCTACTA TGTGGTCAGT  
GGGAATGACC CTGCCAATGG CGAG

SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAAGA AAGAAAGAAA GAAAGAAAGA AAGAAAATGG CCCCATAGTG CTTAAGTCTT CAGACATGTG TCCTGGTGCT  
GGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTTGC AGGTATCCA CCTTCGACTT CAACACATGT GACCAGAAAC  
CTTCCCAAGG CAGCCATCCA CTTTGTGTG CCTCGACGG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC  
ATCTGGCCTT GGCAGCCTAT GGATTNTGC CATCTCCTG GCATGAAATC ACTCCTTCTT GTTGTTTTAA TTTGCATTTC  
TTCACTTACC AGCGAGTTG AGCATCTTTT CATACACTTA CTGACCACTT CTA

SEQ ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAGA ACATCAGCT GTCTTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTGCAAG GCTAGCTAAT  
TTTAAATCTG GTATGAGTAA TACAGTCAA CCTAGTTAGT ATGCGAGAAA GTCGTGCTA ACGCATGGTG AGAGGATGTG  
ACGTCACAGC ATGAGCAGTC CCTGGTTGTC CCATTGTCAG ATAAAGTAG TNNAGTAGNT CCAAGTTTCT ATTCCAGGTC  
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

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SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG  
AGTTTGTGATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAAG ATGAGAGGGA AGCGTAGACC  
GCAGACCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATT  
GCACANTGGG CTGATGGCGC CATTTCCTCA AATNGCCATC GGCACCAGCT

SEQ ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTTTATA TAAAAAGTGT TTCTGTGATT CTCCAGAGCC CAGGAGTCAG TNCCTGGTGGT TGGAGGGACC TGCCCCACT  
GGTTCATTTA ACCCTCTGTC TCGTGGCCT NAGAACCTCA GCCAGAAAG CAAGGAGGAA ATCAGAGCAN GAGCCTCATA  
CTCTGGTGA TCTATTCAIT CTNIGACCTC AGGGGTGACA TATAAGGTCA GTGTTTCTCG TCCCGNCGG ATCTGCACTG  
C

SEQ ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTTT GCATTTTGG TAGAAGGGT GGCTCACCA TGTCGCCAG GCGGTCTCG AACTCCTGAG CTCAAGCGGT  
CCACCTGCT CAGCCTCCA AAGTGTGCG ATTACAGGCT TGAGCCACTG CACCTGCCC AACCTTGACT ACTTCTAATA  
GGGATGAGTC GAGTAGCAGT TNGGGGCTC CTGTGCGCT GGTCTGCCG GAGGCTCCCC TCGCCCCGT CCATGGCTG  
TTGTGCATCT GGCCTGAGT GCCTTGGCC

SEQ ID NO:2038: (Length of Sequence = 151 Nucleotides)

ATTTTAAATT GAGCATTAAG GGAATGCAGC ATTTAAATCA GAACTCTGCC AATGCTTTT TCTAGAGGCG TGTGCCATT  
TTTTTNTAT ATGAAATNC TGTCCAAGA AAGGCAGGAT TACATCTTT TTTTTTTTT TAGCAGTTTG G

SEQ ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTGTCTGTT ACAACCTCCG TATGACGCCA CGCCACCGC GTTTCAGTC CCGTCGGCT CCTGCACAGN CCACAGCTG  
CGCCCGAAG GCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC  
CCCTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGTACGGT TAAATTAGA TTGACCATA TGAAGATCT TTTACCAGT GGTCTCCAAG AATGCTTCC TTATTATGTT  
ATTGGTCATT TTGAGCGTG TGTGTGGTG GGGTGGTTTC TGCTTATAT TCCTTAATA CATGTATAT TTTTGTAAAG  
AATGGGAAT TCATTTTAAT GCTTTTAAC ATCTTCACTG GGAAGTGAA TAAAGTTATT CTTGACTCTG TACCTTGAGC  
CATGTCAAA GTCAGGGGT ACATTTTAGG TATCTAAAA TTACTCTTA ACTTCACAT TCCCTGGGT AGGAAGCTGC  
TGTTCAAGAG AAATTTCCN GTTCTTCTG GCAATGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGTATGAAG TCGAGGAGT CCGTGATAAT GGGCCAAGT AGGATGCAAT GCACCAGGTG TATAAGTAGC  
TGCAGTCACT CCAGCTTCAA TTCCAGTTC CCAGGCAGAC CTCTCTGGAG CCTGTGAGG ATGTNAGGAC ATAGTCTGAG  
GCACATGAAT ATGATGCCA TGACCATAGT TTGGGTGCAT CCTATGTGGA TGGGGTGGG GCGTTCATG TGCCCGNTT  
GGATGCTGCA TCATCCTCT CTTTGAAGT TCCATCCTCT GCATCACTC ATGAGGATGC AGTCTCTGTN CTGGAGGTGC  
TGTTGGCTGA ATATGGTGCG AAATGGCTG GTGTGTAGGA

SEQ ID NO:2042: (Length of Sequence = 403 Nucleotides)

435

GTTATTGTGTG TTGAGATGG AGTTTCACTT TTNTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT  
 CTGCTCCCG GGCCCAAGCG ATTCTCTCC CTCAGCTCC TGAATAGCTG GGAATACAGG TGCCCAACAG CACACCCGGC  
 CAATTGTGTG ATTTCTAGTA GAGATGGGGC TTCTTCACTT TGGCCAGGCT GGTCTCGAAC TCCTGACCCC AGGCGATTCC  
 CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCACTCGGAA GTAATAGTTA TTAACCAATG  
 TGATGGCGG GTGTAGGGAC CCTCGCTGT AATCCAGCA CTTTGGGAGG CCAAGGAGG AGGACCGCC GNGACCAAGA  
 GTT

SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCGTACGG TGTGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CCGCTGTGCA CCCAGCTGGG TGTGTGAATC  
 CCCCTGGACT GCGCCAGGC CACCTTCATC TCCATGACA AGATGGTCAT CTCCTCAAG GGCAGTCAGA TCTACATGCT  
 GACCCCTCATC ACCGATGGCA TCGTAGGTT CCGAGTGTTC CACTTTTGAC AAGGCGGCCA CCAGCGTCTT CACCACCAGC  
 ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTTCTT GCCTGGGCAA NTCTCTCTC CTCAAGTACA CCGAGAAGCT  
 TCAGGAGCCC C

SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTACCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC  
 TGAGACAGTC AGCACTTAAA GGGTGAGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCCC  
 AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA  
 AGAG

SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCATTCT GCTCTGGCC TCTCTGAGG CCTCATAATG GGAGACCAA TCAAAAATGT CCCATGTCAC  
 TTGAGTGGGT ACACTGCCTA CAGAACCTTG AGGTGACTC CTGCTTCACT TCTCAGCTGT TTACCACAGC CCTCCAGGT  
 CCAAAGATTG AGGAGCTTTC TCTTCTCTG GAGGAACCTG CTCANATTTA GCTTGTGTGT GTTTTGGACA GAGGCTCCAC  
 AGCGGTGGCT CTGAGGAAT CCTCACCAGT TTGTTCTCTT CCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT  
 CATTAAACCA GGG

SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACITG  
 CAGAACTGTG CTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AATCTCCCC  
 AAACCTAAA GGCATCCTTT TGTAGTGTG TGCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA  
 AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTT

SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTTNTC CTGTTTTCG TGCCCGGGAT GCGGAATCTT GAGCCTCGGT GTCGGGTAC AGAGTTGTCC  
 TGGTGAOGGG ATGCGGAGGT TTCTCCTTT TTGTGTGGG GCGGCTGGT GGCAGGGGCA GCTGGTGGCA GGGTTGCCCA  
 CGCTAATCTC CGAGTCTCTA AGGCACCGT CTTCCTTGA TCCCTCTTGC GCCTGTGCA TAAAGGCAGA CCGCGGGCG  
 CGCGCGGCA ACCTGAAATC AGAGCAGGCG TCGTGGGCG TCAGGAACCT TGCTGAGCTT CGCGATCTT TCATGTGTG  
 TTCATTT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

436

ACTTTGTGT TCTGATTTTA GGACTCTGGC TGGCCATGIG CTNNNGGTTG CCTCTCCTGC ATTINCCACT GGATTINCAC  
TGCATCGTTT GGAGATACAA AGCGAGCAGT TCTTGGTCAG AACCTCCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT  
GGGTCCTTCT CTCAAGGGTA GCAAGGCCAA GCTGATGGCT GCTTGTTTAG GAGGCCATCA GTTCCTTCCT GTGGAGAAGG  
G

SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTTTATAGTA GAGACAGGGT TTCACCATGT TGGCCAGGCT GGTCCTAAAC TCCTGGCCTC AAGTGAGCCA CCTGCTTTGG  
CCTCCCAAAG TGTGAGATT ACAGGTGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGTTAAG ATGTCAGTNC  
TTTCTAAAGN GATTTTTTTAG ATGCAACACA ATTCCAATCA AAATCCCAGG NTTTTTTTGT AGCTATCAAT TGATAGATAT  
CAACAGCCAG CTGATTCTCA AATTACGT

SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAAGCT AAATGGGGAG AATTGAAGTT TGCATTTGAC ATGGTATTAA ACAAACCAA  
AGGGCTGAAA CTCATGTTTA GACAACACAG GTCCTAGTC ACTAGGCAA GAAACAGTC CACAGCAGGT GGCACAAATA  
ATTCCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACTCG CAACATTCCT CCCACATCCA CATCCACGAC  
GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA  
TGCACAGGGA GAGAATTTNT CCCCGGATAC CCCTGAGGAC CAAGGACCAC CCCAGGCTA GGGTGGGAGG ATTGAGAGCA  
GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAAGAT TGTTTTGTGA GAAAAAGCAA AAACAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA  
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG  
ACCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGGACTGA GGAGGTGATC TTAGTGGAAT TATTTTATAC  
TCACCTCCCC CGGGGTTTAG TCCTTCCTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTTACTAGCA CTGTATGTTT  
CTTG

SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TTTCAAAATT AGTCTTAAGA GTATAAGCTG TTTTINAGGG CTGTAGCCAG ACTACATAAT GAGCGGTGAA AGCGGCTGCC  
TTCCCTCTC CTGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA  
GANGCAACG GCAAAGGNCC CCGCGGCTT GCTCGTGTIT AATCCAGGTT AAGCTATACA CG

SEQ ID NO:2054: (Length of Sequence = 341 Nucleotides)

GTAAATTAAG AATATGGCCC CAGAGTTTTG TTTATCTGGG GTCTGAGCAT AGATTTTATA TTCTCTGTTG CGTTTTTTAA  
ATCTAACTTT CTGTCTCCAA TGGAGAGAGA ACAGGGAGGA TACAGAAGTA TTGCAGCCCA GATCCCTAT CAGGGGGACA  
GCTGGTGGGC AAAGCAGCCA CCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT  
ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCTCT AGGGGTCCA CAGGCCCTG ACCGCACAGG  
GAGGCTGGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

437

CTGCCTCAGC CTCCCAAGTA GCTGGCATT A CAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGACG  
 AGGTTTCACT ATGTTGGCCA GGCTGGTCTT GAATTTCTGA CCTGTGTATC CGCCTGCCTC GGCTCCCAA AGTGTGGGG  
 ATTACAGGCG TGAGCACCAC GCCCGGCCAA CTGTCTTTTC TCTAATGGCT GCGATGTTA ATTTTTTCAC TGGCTTATTT  
 ACCGTCTCCT TCTGTGGA

SEQ ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT  
 CCTCTTTTTC TCGAACTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCCTTGCAGC TACAGCCTCC  
 AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACTTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC  
 TTCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCCGA CGCAGGAAAC TG

SEQ ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAACT TGGGTGCCTG AAGGTGGGGT TTTGATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC  
 TTATATGCTT GGIGCTCAGC ACAGGTCAAG ACACACAATA GACCTCAAT AAATATTTGC TGAATTTGAA CAATTCCTGT  
 AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCCTTCTCC CAGAAGCTCC TGGATGAGC  
 AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAT CGGAGAATGG CAC

SEQ ID NO:2058: (Length of Sequence = 172 Nucleotides)

CTTCTACAGT CAAGGAGCTC AAGCTCGCCG GCGACCCCTG CTCTGCCTC CCACATTAAT GCGGCATCC TCGGAGGATG  
 ATATAGACCG GCGGCCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCG TACCTCGCAG AGGCCAGGTT CTCCTTTAAC  
 CTGGGGGCAG CT

SEQ ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAGT AGAAGGGGCC  
 CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGGTCT CAGAACCAGG GCAAAAAGGC  
 CGNGGGAGCC CAGAACCAGG GCCAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA  
 AGGCA

SEQ ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGTT AAGGAGCTTG GGCTTGATCC TCTAGGCAGG GAGCCGTTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG  
 TCACACTGCG CATTTATGTA GATCGTTTGG GCAGCCAGGG GAAGGATGGA TTTNAGGGGG ATGAGATTAG AAAGCTGGGA  
 TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG  
 GACTTATAGC AGAGCCTGTT GAGTCTTGCT TTTGCACACA GTTCAAATAA TCACCTTAGT ATGTGGTTTA TCTTGCCA

SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGATCAT AAGCAACTCC TGTTCTGTG GGTTCACCA CATCTCCAG AAAGTGAAGT  
 TTGCTCATA AAAATTACAT AGAATGTAAA CTAATTCAAT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG  
 AGCATCAACA CTGACAGAAT ATTAATTCTG AAGCCCATTA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG  
 TGIGACTATC CCAATTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAATA ATAATCTCAA GGTAGNAAA CTAAGACATA  
 ATTCTAGCT C

SEQ ID NO:2062: (Length of Sequence = 316 Nucleotides)

438

CTAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG  
 GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT  
 ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AACTAATGA GAAGAAAGAT  
 ACAACGTATC AGAAACTCTG GGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAAATGCTC ACATTG

SEQ ID NO:2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTG GAACTCTCT AGCAACTTGT NTTCATCCAG TGATACTGGT TCTNIGGGGG  
 GCACTTACAG GCAGAAGTCC ATGCCCGAAG TGTGGAGTG AGCGTAGAT CCCAGCCTC CACTGACAGG CAGAACACCC  
 AGTCAGATAT TGGTGGCAGC GGAAAATCCA CGCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC  
 AGTTATAGAG GACCTCAGGA TTCAATTCT TTTGCTCTG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEQ ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAAGA ATCCTCAGAT GGGAGACCCA GCCAGTTTGG NTCACAAATT AGCAGAAGTC AGCCAAAATA TAGAGAACT  
 GCGAGTAGAG ACCCAGAAAT TTGAGGCCTG GCTGGCTGAG GTGAAGGCC GGCTCCAGC ACGCAGCGAG CAGGCGCGCC  
 GGCAGAGCGG ACTGTACGAC AGCCAGAACC CACCCACAGT CAACAACINC GNCCAGGACC GTGAGAGCCC AGATGGCAGT  
 TACACAGAGG AGCAGAGTCA GGAGAGTINAG ATGAAGGTGC TGGCCACGGA TTTT

SEQ ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGTT TCACCGTGT GCGCAGGCTG GTCTCGAAT CCCGGTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC  
 ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AACTCTTTGG AGAGAAGCAA GTCTCTAGC TGAACGTGAT  
 AATGGCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC  
 ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCCT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA  
 GCAGCATTTG G

SEQ ID NO:2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CCGACCTCA GGTGATCCAC CANCTCGGC CTCCTCAAGT GCTGGGATTA CAGGCGTGAG CAACCGCACC  
 TGGCCTTGAA CCGTTTGAAG TATTGATGCA AAAACAAGTG GTGAGCTATG GCCAAATTG CAATTCAAAA AGATCCAAGA  
 AAGCAAGTTG AACATCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA  
 GCCAGTNTAA GCAGGTTTTA CCCAGCCCA TGATTAGAG AGATGTTNAG TGCAGATCCT GAGCTCAGCA GAGAGCAACA  
 T

SEQ ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCGAGGT TGGCTCACTG CAACCTCCAC CTCCTGATCT CAAGNCGTCC  
 TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGAA CTACAGGTGG ACAACATCAC ACCCAGCTAA TTTTNTINAT  
 TTTTGTGAGA GACGGGGTTT CACCTGTGT CCCAGGCTGG TCTCAAACTC CTGAGCTCAA GCAATCTGCC CACCTAAGCC  
 TCTCAAAGTG CTGGCAITAC AGGCATGAGC CACCGTGCCT GGCTGGGAA GCTCTTTTAA CAGAGGTGAT GTAAAGTAGA  
 AAAAGCAGTG GGCTC

SEQ ID NO:2068: (Length of Sequence = 274 Nucleotides)

GCAACCGAAT GGACAGGGTA AAGAAGGAAT GGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCAAAGC AGAGAGGCAG  
 ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

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CCACCTGGCC CGAGTGAAG CTATGCTGAA TGACCGCCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG  
ACCCGCCACG GGCINATCGN ATTCTNCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAAA GAATTCAGGT CTGAGTGTCC AGGAAAGGGG GTGAATTTCA TAACCGCCTG  
TGACAGCGAT GGAAGGAGC CACACCCCTC CAGAGGGTAC CACCCAGCGG ACAAGTGGG AGGAGGAAGT AGCTGGCATG  
AAGCGGCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCTTT AAATAGTATT TCATAAAATA  
AAAATGCCCA GCACTCTTAG GAACCTCTCA TTCAACCGCC TAGTTTTTGT TTAAATAATT CTAATGCCAG AGCTGGGGGG  
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAATTTCCAA CCAGGGTCAC AGTCATCGCG TTATCCCACA TTTTGAGCAA GGATAGAGAA  
GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAACTTTGG  
G

SEQ ID NO:2071: (Length of Sequence = 288 Nucleotides)

GTGGAAGGCG CTTCATACAT GCTTCCCATC TTCAGGAACA TCAGAGAATT CATACTGGGG AGAAACCAAT CAAATGTGAT  
ACATGTGGTA AGAACTTCGG TCGTAGATCA GCACTTAATA ATCATTGCAT GGTCCACACA GGAGAGAAAC CATACAAATG  
TGAGGNCITGT GGTAAAGTGT TCACTGTAG CTCAAACCTT CGTATCCATC AAAGGGTCCA CACAGGAGAG AAACCTTACA  
AGRTGAAGA ATGTGGTAAG TGCTTTATTC AGCCTTCACA ATTCAGG

SEQ ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCTGTCTTC AGACCCCTTT GCGTATTTGT CCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT  
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG  
CAGTGAGGAG ACTTAAGCCA GGGTTCCTNC AAGGATATNC ACCGACCTT CCTGCATCTC TGNATGCCGG ACTCCTAAGC  
ATTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCCTGTG CGAAGGACCT GCGTCTAGA GATGTGGTGT CTCGGTCCAT GACTCTGGAG ATCCGAGAAG  
GAAGAGGCTG TGCCCTGAG AAAGATCAG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGCGCCTG  
CCTGGCATTT NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCAAGAA GGAGCCGATC CCTGTCTCTC CCACCGTGCA  
TTATAACATG GCGGGCAATC CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCCCTGG CTAATTTTTG TATTTTTAGT AGAGACGGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT  
CTCCTGACCT CAGCTGATCT GCCCACCTCG GCTTCCCAA GTGCTGCGAT TATAGACAGG AGCCACCGNC CCCGACCTC  
TCTACTTCT CAAATCTCTT TCTTTTTCC ACCTCTTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGIT CAAAACCAAG  
CTGACCGGT AAGTATTTAC AGCAAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GTCTCTAGGA TCACTCAA CCCAGGATCA CGTTTTGTA ATGTTATCAA GGCAATGATTT TGGATTTAG AGCTGGCCCA  
GTGAACAACA AGCAATCAAG CATTCCTTTC TCTTCTTTC TCTCTCTCAC ATATACACAC ACACCTTTTC TCTCTCACGT

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TACTTTCACT GTCACCTTCT CTCTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACTTTCTT CC

SEQ ID NO:2076: (Length of Sequence = 223 Nucleotides)

GTCACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCTNACTTCT  
TCCTGGTTTA GTCCTGGGTG GGTGTATGTG TCCAGAAATG TATTGATTTT TTCTAGATTT CTAGTTTATT TGNGTAGAGG  
TGTTTATTCT CTGATGGTAG TTGTATTTC TATGGGATCA ACGGTGATAT GCTCTTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCCTCTTGTG AGACCAGGCT CTGTCTCAGG AACAGGCCTG AGGGAGGAGG AGCCACGTTT CTCCTTCCTT  
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAGCATG ACATCCAGGT GCCAGCTGGC TAAGAAATGG AGCCTGAGGC  
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTGAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC  
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT  
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTTCAGT TGTAAATCA AACCTACTGA CATTATAGT CCCTTACTTT CTCTTCTTTC TTCCATTGTA AATGTCIGAA  
ATGTCGTACA GTCATACTTC CCACTGTATT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACCACCC TTTATTTCAA  
TAAAAGTTTT AAGTCAGTGC TGATTTTTTG GTAGCTCCCA TTTTCTGATA TATTGTTCAT GTACATATGC AAGTGATGT  
AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACACG

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCTGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGTTAGT GGTGTGCAAA CTTACTTCCT TTAAATGTCC  
CATGGATGTA GGACAGTGCC ATGTTTCAAG ATGCTGTGA GCTAGGTCTT CAAGATTTAT AGAATGTTAC TTATGAACAA  
AATATAATTA TTTATGGTAC AATTCTTGTA CTTTAGCAAA TCTGGAGTTA GTTCATAGTC AAAGTCAGTT AATATTTCTT  
AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCINCTT TATTAATACT CACATGTAAC CTTTGCTTTT TACACAAAAG TCTGCTTTAG  
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTTCTGGA CCACTTCCCC TTCTCCACC CCCACCCCA  
CATCCAAATT ACTCTTAACA TGTTACAGA TACCACGNAT ATTTTGTAAG CAAGNTTTGG GTTACTGGAA CTTGATTTC  
TTAACATCCC ACTTCAAAT GGAAGGCAGG TGGAGGGCAG GGTAAAGNAA TAGGGGGAAA GAGGGCAAGA G

SEQ ID NO:2081: (Length of Sequence = 207 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTC CCCCCTAACCT TTTACTTAGC CTTTTTGGTT TGINTCCCCA  
CCCCACCTC CTCACCCCTT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCTT  
CCAGCTCCA GCCTCACCTT TGTCGCCAGA CTCGCATTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAAGAAA GTGCATACCT ATTTGCAAGG AAAACAAATG GAATAGACAA AAATTTTAGA ATATAAAGAC TTTTTTNCAT  
TTATGTATGT GTTTACAATT CAAAATAATA AAGCTAGTTA AAAGTCAATA CATATTAGAT ATATTCAAAT ATTTTNCAC  
ATAAATTTG ATCTTATCAG TTAACACCCA TAGCAAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGTAT TTGACCTCAT  
ATTCTATTCA TTTGGGTTTA



SEQ ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCCA GTGGCCAGTG  
GGGTCAITTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA  
ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA  
CTGTATCAG AACATACATC AAGGTGAAGA GTTTCGGCCC TCTTGGTATA GGGTATGIAT GTGTACATCT CCAATTTTGA  
ACAATGATGA CATAAGNCT AATACTCTAT TTATTCAGGN GACCCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA  
AAGTGATCAC AGTTG

SEQ ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAAGTT TTTACTTAGC CTTTTTGGTT TGTGTCCCCA  
CCCCCACCTC CTCACCCCTT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCTT  
CCAGCTCCA GCCTCACCTT TGTGCCAGA CTGCAITTTG GAAGACTCCA CCTCCGCCC AGGCCTGGG TGTGGGGGG  
TTGGAGATTC AGGTTTTAAT CCACACAAGC CCCAGTGAGG GGTGAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT  
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCCA GTGGCCAGTG  
GGGTCAITTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA  
ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCGCAA TATCAATTTT CCCAACTCAG CCAAGATTTT  
CCCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAGCCGA AGAAAACACA TTTACAAGAA GCTGAACAAC  
TTGTATCAGA ACATACATCA AGGTGAAGAG TTTCCGCCCT CTGTGTATAG GGTATGTATG TGTACATCTC CAATTTTGA  
CAATGATGAC ATAAGNCTA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTC AGAGTAATAA  
AGTGATCACA GTTGAATGAA CGTGTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT ACATT

SEQ ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATTGAATAAC TTAGGCAATC TTCCACTTTG ACTGAAATGA TTAAGATCAG TTTACCGAAA GTCATTTTCAT CCTTGCTTG  
CAGGCATCTG GCTATCTTG GTGCAGGGCT GATGGGAGCA GGCATGCCC AAGTCTCCGT GGATAAGGGG CTAAAGACTA  
TACTTAAAGA TGCCACCTC ACTGCGCTAG ACCGAGGACA GCAACAAGTG TTCAAAGGGT AAGCCTGCTC TCTCTCTTG  
CAAGAGTTAG AATGTCCTTT GTTCTTGGT TAGTTGTTTT TTGTGGTGGC TTGGTGGTT TTTTGTGTTG TTTGTCTTG  
CCATCA

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT  
CGGGTCTGCT GATCATGGGA GCGGCGGAG GCTCCCTCAT GTCTCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

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GGGGCTATCA GCCATGGGTT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCGCGAAC TNCAGCGGCA  
CGGCTATGAG AACCCCACTT ACCGCTTCCT GGAGGAACGA CCCTGACCCG G

SEQ ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACACGC CCTGGTACAT GGCTGAATC TTCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG  
GAACCTCTT CATCCGCTGC AACATCGCCT GGTGCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GGTGCTGGAG  
GTCATTGTGG TGA CTGCCAT CACTGCCATC ATTGCCTACC CCAATCCCTA CACAGCCAG AGCACCAGCG AGCTCATTTT  
TGAGCTGTTC AATGACTGTG GAGCCCTTGA GTCTTCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGGAAAT GGTCAAACAA TTAAAGTCAA ATGTTTAAAT GGTGCAATTA AAATAAGGGT TCAAACATGT TTTCAATATA  
TTAATTNCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTTA AAAAACCCT ATTAGCTTTG TCCACACATG TAAGTTATCA  
AAAGTTACCA AGGTAAATTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTTACTTC TCGAAGCAAA  
GAGAGCCCC AACCTTGTA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTACGTAGG ACGCTGGCCC TGTCCTCCGG CCGNTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTGCAATGC  
CTGGNAGGGT GGTTCGTCC AGGTCCAGGA GGCAGATCC ATGGGCGATG GTCCTCTGA GCTCCAGAAG GCTACGGAAG  
GAGAGCGAGG CAACATGGGG CTTCCTCCAG CGCTCCGTCT CCTCTCCAC GTCCTCTCA AACTTGATCC AGCGGGCCGT  
CTCCCGCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTG ATACAAGTGG ACCTAAAGAA ACGAGTTCGG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC  
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGACAGAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC  
CCAAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT  
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC  
CCC

SEQ ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGTTT TGGTTCCTG CCTCAAGGCC GGCCATGTGG GAGTTGTATC TGTGGAGTTC ATTGCCCCAG CCTTGGAGGG  
AACGTATACT TCCCATTTGG GTCTTTCTCA CAAAGGCCAG CAATTGAGG CTCGGGTCTG GTGCAGTATC ATAGTAGATC  
CTTTCCCTC CGAAGAGAGC CCTGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG  
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAAACAAAG AAAGAACTN CTGAAGTCGG GGGCTGCTAG  
AGGATTTTCA GGAAGGGTCA ACACAGGCCT CACTTCCAGT CCCTCATTTT CCAGCTCACA GAGTCACCAG AGGGTGAGAA  
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CTTTNTCTC AATTACAAAG GGGTGCATTT CAGAGGAGGG  
AATAGGGATG GAGAGGAGGA GAAGACCTGC CCAGGAGCCA GATAAATTCA AAGTCACCAA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)

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CTAGATATAA CTACCTTCT CTATTCCTCA CCTAAATCCT TATACTGCTG ATGACTTTGG AAAATAGTAC AGGGTTTTAC  
 AGTCTAATCA TGACAATACA TCTCCAGGNT CCTTGAGCCA AATACATTCC TCAGAATACT TTTTTTAAAA AACTGAAATT  
 GATTACTTGT ACTTTGTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACITCTAC CATCCTCACT  
 ATTGTAACTC ACAGTAGACT ATGCTCTCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCATTG TTCCACCTTA  
 AACATAT

SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCTGCTG AGGTCAATTT CGTCACTGAT GCTCGGGTC ACATAGGCCG TGATGACCCA GATTTACAC AGAGGTCAGT  
 ACATCGGTCA ACTTCTCTCC CAGGAGGGGC CGGGCTGGT GGGCCATGCC CACTCCGTGC CACATGCCCTA GCATTGAGAG  
 CTTGTGAAGG AAGCCCTGTT CTAAATGCTC AGGTCCCACC CTTCTTGTG AAGAGAAGCC ATGGGCTTCC TGCTCCTGTG  
 TCACAGTGTG CCACITGAAG GGTGGCTCTT CCCATTCTT CTTCCATGGG GGCCAG

SEQ ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGTTTIN TTGAGTGTG TCTTCTTTT NTITGTTTT AACATACTTA CTGCGTATAA AGTCATGCAA AGAAAACAGT  
 GCAGACAGTA GATCCTAGTG GATGTGCCAA GGTATTCCAC TCAGAGTCAA TCCCAGGGAA AGAGGGAAAG AGGAAAAGAA  
 AGAGAGAATG CGAACCCGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAAT TCCCAGTGCT TTGCTGTGGT CATCAGACGC  
 CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGGCC CCCAGAGGTG GGTGGGGGGT GCTGGGGGGC GGCACACAGA  
 TATG

SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGTCA GTAAGGAGCT CTTTATCTTT ACCITCCCAC TCCAAACCTA CTGCTAGCT GTTCTTATCA TTGCTCTCT  
 TTTCTCTGTC AAAAAATGT GTTCCATCTT AATGAACACA TTTCATTAAAT GTCTTCTTA ATGAAGGACA GTCCCTTTCC  
 CTGTGCTGTG AATCCCATAG TAATGACATT AGCTTAAGTT TTCTGAGCAC TTGCTATCTG CCAGTTCCTC CCATGAATTIA  
 TCTGTCTTAA GCTTTCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGAAAATCTG TTATCATCAA CAAGACCAGC AGCACCAGAA  
 TINTCCGAGT CTTCCAGCAG TGCAGGCTCC TCAGGNTGCG TGTCCTGCAC CCATCCACCT CTCCAGAGCA CACCCCTAGT  
 CTCAGGTGTG GCAGCTGGCT CTCAGGCTG TGTGCTTAT CCAGAGAATG GAATAGGGGG CCAGGTGCT CCCAGCAGCA  
 CCAGCTACAT CCTCCTTCCA CTTGAAGCTG CAACAGGCAT CCCGCTGGG AAGCAATCCT TCTTTAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGTINTGGT AGATAAATGT  
 CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT  
 TTGNGGCCA CGCATAGGAC TTCCACAGAA CTTTTTCAAA GGCAATCACC C

SEQ ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGTGTGGT AGATAAATGT  
 CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC  
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

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TGGTGCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT  
AAT

SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCTG GNTTCCTTCT TTTTGAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CTTTCACTC CCCCGCCCTG GGCTCTGCT CTCTTGCTG GNTTCCTTCT TTTTGAGGG AAAGAGGGTG GGGCTGCAGG  
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA  
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC  
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG TAAGGTACCC TTCCTTCTC TGGATGCTGG TTTCAACCAT CTATATATGG  
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCCTACCC GCAGCTT

SEQ ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCTCANAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG  
GNATCTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEQ ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT  
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT  
TGCTCAGAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG  
GCATCTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTT TGGCAGTCT  
GATGCAGAGC CTGCACTCTG GCACTCGCT

SEQ ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GNTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA  
CCCTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TTTTCATGGG CCCGCTGCC CTGTCCCTCC  
CCCCAGGTCC CCACCTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAAAT NGGGAGCTAG AGAGAGCCCA  
AGTGAACCTT GACTGTCCAC GCAAGTCCCA TGCTCTCTC GTCTGGAGT TCCTCGAGGT TCAGCGAGCC CATCCGCTT  
AGGGCTCTT

SEQ ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGTAACA CAGCAAGATC ATACCAGTTA ACCTTCTCTG TTAGAAGACC  
TGAGCTCTCT GACTTCCGGT CACTGGATAC TCTCTGTAAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA  
CCTCTAACTC TCTCTGCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCTGTGTATA  
GCTGTGAGGG ACAAGGCAGA G

445

SEQ ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC  
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTTAG GCTCATGATT TAAACTCTGT AGTCACCTGT GGCTTGGAAA  
CCTCTAATCT TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCATTGA GCCAGGACTA GGTTCATATC CCGTGTGTTA  
GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCCATTA ATGTTTGGGG GATGCTATGA CTCAACTTTG  
ATCTATTTT

SEQ ID NO:2110: (Length of Sequence = 271 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTGG CCCAGGGCCA CCGTGCCCTG  
AGGTCCTTGT GTGGCCGCC TGGCTTGGCA GCGCTGCCCA CGCTGCCCC GCAAACAATG GTGTGTGCGT TTTTACAGCC  
CTTTTATAGG ACCCAATATG GGCATAAATG TAACACCTGT AGCGGGGGCA GATCTCTGT ATGTNCAGTT AACAAATTAT  
TTGTAATGTA TTTTATTAGA AATCTTAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCACGTTC NCCCAGGGCC ACCCTGCCCT  
GAGGTCCTTG GTGGCCGCC CTGGCTTGGC AGCCTGTCCC ACCTGTCCCC CGCAAACAAT GGTGTGTGCG TTTTACAGC  
CCTTTTATAG AACCAATAT GGCATAAAT GTAACACCTG TAGCGGGGCG AGATTCTCTG TATGTNCAGT TAACAAATTA  
TTTGTAAATG ATTTTATTAG AATCTTAAA ATTCCTTTG CACTGAAGTA TTTTCATAGC TGTATATC TCTTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG  
GACACTCCTT TACCTCCCAT ATCCAATGTA TGTTTTTAC AGAAAAACAA CAAAATTAC AAATTCACAA AATACAACAG  
CTAGAATTAC AAAATCCATT CATCCAAGG TGTTAGAAGG CAGGATGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA  
AACAAAGTGT TCCAATCAGT CCAGGCACAG GGAAT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAAT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGT AAGAGACAAC  
TCCAGTGAG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATCTT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEQ ID NO:2114: (Length of Sequence = 339 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAAT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGT AAGAGACAAC  
TCCAGTGAG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA  
CTCGCAGGGC AGGGCATCTT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGG GCAGGAGGGA  
AGGCCAGTTC GTNGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG  
GATGAGGTGG CCGCTCATG

SEQ ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATTCCTTGT NTTAACAATG TACATTCGGG GCCTAGCTGC CCTTGAGGAT GTCCTAGTTA CACCCTCTCT  
GATACCTGTG GAGTTTAAGC ACCATTCTTA CCGCTGTGTC CCTTNGGAGG GGTGTCAGTG GAAGCTCTTA AAGGGGAATG  
CTTGCTCTGC CTCTGTGGCT TTTTGTGTGG GAAAGGGAGT TNGGATNGA GGATTTAGAT TTNAGGTCTAT GATGTCAGAG  
CACACCAGGA ACTCCAAGG CT

SEQ ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTGCT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG  
AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAAGGAC GGT

SEQ ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCTNCA AGGNTGATC CACCCTTNCC CATCCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT  
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTGCTGTC TCTCGATCTN CCGCTGGCCA ATGTAAAACC  
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCACCAC GGCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

CGGGAAAGAA CAAATGGGAA TGGTGGGGGA TATGGGTGTG TGGTGGGGGC GGGGCAGGAG GTCCCTCCGG GTCCAGCATG  
GGTGGGAGT GGGAGCAGGA CAGAAGGTGG CCACGTCACA GGCGACTGAT GCTCAGCTCA AGGGGAGTGT GAAGAGGTTG  
GCAAAGAGCT GGGGAGCCGG GCAGAGGGAC AACACTGACT NAGGACATTN CAGTTGGGAA TCAGAAAAAA AGGGGCAGCT  
CAGGGGCATC TGATCTGCCT CATTTTGTAA AAAGAAACAG AGTAATGTAC AAAATTCTGG ATATCTTCT

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGTAATCGTT GAAGATTACC AAAGGTTTAT TTGGAATGAC ACAGCACTGA AAACATAATT GTTACAGATG ATTTGTGGAT  
ACAGCATACA CCATCTATTT TACTTTAGAA CAATCTGTGA AGATGAGTTG CATAAATAGA AAGAGGTGGA AATATAGAGG  
AGCTGTTTTT ATAGTGTCTT TTTGGGGTA GATGAATATG CCCCATCTTT CTACCCAATC TCATAAAGGC AGAAGAGAAG  
ACTGCTTAGC TGCCCATCCC AACTAGCCTA CCTCCAGCCA CAGCGGCTGG ACAGCTAGAT AAATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CCGCTCTCCT GACGGGAGCC CACTAGGGGG TCCTCTTTCA TCTTTGGTGT GGCCTTACCT CCCACCPAAG AGATCCGAGG  
CTTACTCTTC TCTCTCTGGG ACCAGCATGA CCCAGGAGTC CTTCCAGGAG AGCTCTGTGA AGGAGCTGAG GCGGCTGGAG  
GACCAGCTGG CCGGCCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GCGTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACIN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC  
CTNATGTCCT AGACACATGG TTTTNTTCTG CCTGTTCCTT CTTTTNIGCC CTGGGCTGGC CCCAAGAGAC CCCAGACCTT  
GCTCGTTTCT ACCCCCTGIN ANTTTGTGAA ACGGGCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCA GAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGGA GAATCCCTTA  
AGCTCCAGGG CCCAGGTCTT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGGCTGG GGGAAGAGGA  
GCCTGCCCCC AGCAGAAACA GCAGGTCTCA GCGGCTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCCTCT GTTCTCTTGA TGTGTAGGGA AATTTGAAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATCGAATCCT  
AACTGGCTGT GTGACCTAA AACCTTACTC CGTCTCTTGT AACCTCAGAT TTCTCAGGCT TTGGCACATA GCAAGCATTT  
CATACTCAGA AGCTGGTACT ATTACTGTTG TGTTTTGTGG GGGGAGGTTT GTTGTGTTTG TTTGGAGACA GGATCTGGCT

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TTGTTGCCCT GGCTGGAGTG AAGTGGCGCC ATCATAGCTC ACTGCAGCCT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC  
CTCAGTCTCC CGAGTAGCTG GGACCACCTG CGGATGCCG

SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCCGT GCATCTCTTG TCTGTTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCAAGAGGGC  
TGCTGACGGC ATGGGTCTGT CTCAGGGTG GCAATACCTC TTAGGAACCT AGGGCAGGAA GCAATACTTC AGCATTGAAT  
GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TTGGTCAGGT TCAGGGGGGC TGAGGGGGTG CTCCTCCCTT CCCCCAGGC ACTGACACAT TGAAAGGAAG  
CAGAGCAACA ATGACACAGC ACGGATGTGG GAAAGGGGAT CCCCCAGCG GGCAGGATGG TCCATCTCAC CGGGTCTCA  
CCAGGACTCC CCGCTCCAC CCAGGGCCAG CACGAGCACC TCCCGTTTTT TCCCCAGTGC AGAGCGTGGG GTGACAGGAG  
T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTAATTCTATA AGGAGTTGTA TCTTCCCACC TGCATTTCAA TACTGCCGGT TAGGACCTAA  
GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTACCCCTT GCTGTGCATG  
TATCAATCCT TATCCAGAA GGTACTATTT AGACTGTATA GACTGATTTA GATTACATAC TTTAGAGGAT TAAGGAAACC  
ATAGAGTTTG GGCCTTGGAA CTGTACTGC CTGT

SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT  
GATTATTACA CCAAATTCG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTG CATCGAATAC  
CTACACGCC ATTTGAGGAA GGAAAGAAA TTINTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAAGAT  
GGGTTTACAG AGGTCCAGCT GTCTCAGTT AATCCCCCGT CTTTGTACAC ACCAGG

SEQ ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTITGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC  
AATTCCATTT TTCATCAGAT AGCAGAACA CTACAACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA  
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATTC AGCGTCACCA TCACAAGGGA  
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTGAG CAACAGGATA TGGATATAGG  
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGGGCCCCC GGCTAACGGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT  
CCAGGCCTCC CCGGCTAGGT GGAGGTGAC ACGCAAGC ACACGCTCT ACCGAGGCGG GGCCAGGCG GCACCAGCCC  
CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTGGGATGCT TTATTTCACT GTGGCGGGG GGAACCTGG ACAGGGGGG GCAGGCGGG TGGGNGGCTG GCACTCAGGC  
GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCTGTGTA GGAGAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCCCAGC  
GGGGTAAGGA GGGTGGGGGA AACTGGGTC T

SEQ ID NO:2131: (Length of Sequence = 280 Nucleotides)

CTGAGTCTTG TCGATCCCGA CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GTTCTTGTGG ATGGTGTTCG  
GGTGGTCTG CAGCCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCA AGCAGACCAG GGAGATCACA ATGCCACCCC  
AGGTGATGAC CGACAGCAGC AGCTCGTIGA TCGGGCCCTG GTAGATCTCA CGGTGAGCCA TGAGCACAGC GAAGTTGGTG  
AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTTGGAAT

SEQ ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATTCCTGTC TCCTCCCATG GGGCTTTAGC TCCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA  
CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAATC AGTTTCCCCA  
GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCTTCC T

SEQ ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAAATG TTGTGACCAG AGGCTTGCCA TINCCTAACT CTATTTGCCA GAGGAGCAAT AGTCTGTAT TCGCTAATTT  
TGTGTTTACA GAGACTTTAA GGAACATGAC TGTGGGAAT AACAGAATT AAAGGTATTT ATTTACTTNC TCTATATGAT  
TGTAATATTA TACCCATACT

SEQ ID NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA  
AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC  
TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGAGACTT CAACCAGGTG GCTTCACAGC TGTGGAGCA CCCAGAGAAC  
CTGGCCTGGT TCGACCTGTC CTTTAATGAC CTGACTTCCA TTGACCCGTG CTAACAACCT TT

SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCCTACCAAT CTGACATTCA CTATCAACCA CTCTTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT  
ATATCCTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGCTTCTGT TGAAATTTAG AGCTGGAAGA AAGGATTTCA  
CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC  
CGGGGACCAA CTCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAAC G

SEQ ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCTT TTGTTGTAT GGTGTATTTT GTACATTTCA GCATTTGCAT CATACAAAGG GGGGAGCAAC  
AGCCATGGCT TTTGGTCAGG TTCAGGGGGG CTGAGGGGGT GCTCCTCCCC TCCCCCAGG CACTGACACA TTGAAAGGAA  
GCAGAGCAAC AATGACACAG CACGGATGTG GGAAAGGGGA TCCCCACGC GGGCAGGATG GTCCATCTCA CCGGGGTCTC  
ACCAGGACTC CCGCTCCCA CCCAGGGCCA GCACGAGCAC CT

SEQ ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCTTAGT GGATTTTGCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTCAGCTA  
CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTTCTTCAT TACTACTTTA ACCAGTATGT TAATACTGAA AATAGGTATA  
AAGAAATCAC AAATAACCTT CTCTGTGTG AAGGAAATTT AAAATAGCAC ACTTAAATG AAAGTNAAGG GAACTTTAAT  
TCACTACTGT AATTTTTTAA TGCTGTATC ATGTAGTGTG TGACAGTTT TAACCTTAGT TTACCATCTC TTACTCTTTA  
GT



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SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCOGA TGTCTTATG CTCCATCAG CAAATCTCAA TTGTCAAGA TTCATGACAG ATTCTTCCCC  
 AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCTTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA  
 CAACCAGGTC CAAGAGOGAG TTINCCCCGA GCGGTTGGC ACCATGTACC GAGGCACAGG CGGCTTCCCC ACAGGCGTAC  
 AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCTCA GGACCTGCCC CTGTAGTTG GTGGG

SEQ ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGCCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA  
 CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAGG CCTGGGCCAA ATAACCTCCA AATGAAACAC TCAACCCAAG  
 GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAGGAGA GGATACAAAG TCAGGTGAGT  
 AGGGGCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTICANT CTGCGCCCT CAGCTGTGC TTCCCGCAT GCCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG  
 TGCTGGGGGA CTCAAAGACC CAGAGTTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC  
 CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGTCTC GGCTGCGAC TTGTGGAAGA AGAGGGGGA GGATGGGAGA  
 AGGGGTGACT GGATG

SEQ ID NO:2141: (Length of Sequence = 355 Nucleotides)

TTTAATTAA TACCACTTCA TAATGTIATT TGCACCTAGT ACTTTTTTTT TTTAAATAA GACATGCCAT AAGTOGTGAA  
 GTTAACAAA TATAAGCATC CGCACAGAAT ATATTCTAAG GTGACTTCAT TTACACCGCT TCTCAGAGAA ACACACAAGT  
 AACCTTTTGT CTGCCATCA GCCAGTGTG AAACAGCTTT GGAATTCACA TGGAGGCTG CCGGGCTGGT TCCCCAACAC  
 TNGCCTGATG GAGTCCIGTA TCCGNACCGT GCCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT  
 CCTTCTTTA CCCAGCGTTC AACTCCACAC TGCAA

SEQ ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAG CTGTGGGTGC CCCGCCCAT TCCCTCCACT CACTCTTCTT TGCAGGTGGA  
 CCTGCCCTTC TTGTCTGAGG CCTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG  
 TCTCTCCATA GCTGCCCTCC ACCAGCCTGC TCCTGAGACA CTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA  
 TTCAGCCGA CAGATGCTCA CTGCAGAGAT CTCCAAGGNC TGTGGTCAIC CTTGAGCCCA TCTCAGATTT GTGTGGATAG  
 GGTGTAGAG AACATGGAAT CAGCTGGATA GAGTGGTTCA TGCTGTAAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA  
 CACGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GGCCTGCCAC GGCCAACTCA  
 GGTGAGCCAG CCTGAGGCTG TGGCTCCAA AGGTCTGGG CGCACCCCCC AGGTGCGAGG TINTGAGGC CAGCCAACTT  
 GCAGAGCACT CGCGGCTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG  
 AGACTG

SEQ ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCCCG GTGATGTACA GCAGCGTCAN  
 AGCACCCCA GGAAGTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

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CACGGCGTGTG GTGCAGCCCC GCACGTAGAT GACATCCTGC ACACGTAAAC GCTCCTTGTC GATAGTTTIN TAGCCACACA  
 TGGTGTGAC AACTTCTGTC GTGTTCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCAGTGCAG  
 TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCCT

SEQ ID NO:2145: (Length of Sequence = 420 Nucleotides)

CGCCAGGAGC TGCTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCCTG GTGCTAGAGG AGGATGGAAC  
 TGCAGTGGAC AGTGAGGACT TCTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGTG GCAGTCTGGT CAGAGCTGGA  
 GCCCTACAAG GAGTGGAGTG CTGTCATATG GCCTGGGACG GGAGAGGCCC AAGCACAGCA AGGACATCGC CCGATTCAAC  
 TTTGACGTGT ACAAGCAAAA CCTTCGAGAC CTCCTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT  
 GAGTTGTGAC TTTCAAGGAC TTTGGCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTTGG ACCTCCACAC TTCTGCAAGG  
 CCTGGGCCAT ATGTTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTCCCAA CTATGTCGGG CGGCCGAAGC ACATGCGGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT  
 CATCGGACCA AAAGCAGAGG AGCACCGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGGTG CGAGACTNGA  
 ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGGT TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGCTCCTC  
 ACGGAGGCCC CGCTCAACCC GAGTAAGAAC CGGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTCAACG TGCCGGCCCT  
 GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TTTGTGGTGT GAGAGAACT GGTTCTCTGC CCGGCTCTGC TTGGTCACAG ACAGCTCCAG CAAGAGCAGT TGTAAAAAGT  
 GCCAAGCGTG TGTATCACTG TGACAAGCG TTGTCTTACT GCCCTGTTCC CTTCAGCCA AACCAGCTGA TGAAGAACTG  
 CTGCCAGNG GGTCTACAG CAGGTCACAA ATGACCTAGT TTCATTTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCTTTA TTACAAAAT ATTTTGCAAG CCAAAAAGTT TAAGTTGCAA CTATATACAA AATGGGGCCT GTTCTCTTCC  
 CAGCAGTCTT AAAATAAACT CTTGAAACCA TGCTCCTTCC GCAGGTGGT TCGACCTCTT CCTTTCTCTG GGGTTCAATA  
 CACAAGGTAT GTGGATTCTC CAGGTGGCCA GGCTAAAGCT AAAGCTATAC ATCTTCTCTG GCCTTATCTC CTTATTTCCC  
 CCTCCAAGAA TTAATAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAAA ATACTGAATG TGTGTGTGCA  
 TCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

GGGAGACTT TGGGCTTTNN TCATGACTGT TTGGGTCGAA GGTAGCTCAA GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT  
 GTGTGTGTGT GTATGTGTGT AAAGTGCTAA GAACGTGTGCA TTGACATCCA AACATTTCTT GTACAAAATT TCCCTAGCAA  
 AGCAAACCTG CTTTGACTTA ATTTATTTGT TAAATGTTGC ACTTTGTTTA TGTATGTTTT GTTTTGGTG GGGATAAGG  
 AGAGAGAGGA CGACAAATTC TATTGAAGTA TTTATTTTGT GAAGATGGCA ATTTTGCATT TGTTTAATA TTTTTCATTC  
 NNITATTTT GTTATCAGTG CCAGCCCAAN ATACCTGCTC TACCATTAAT TTGCGGGCCT GATAAAAAGG GTCC

SEQ ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA  
 CCTCAGCACT GATGACATCA ACACCAGCTC CTCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG  
 ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG

SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GTGCGCCCCA GTCTTTCTGA AACCTGTNAT CACACTTCGG GCACTGTCCC CTCTACAGTC AATCTGTGTT TTCAGAAGTG  
GCCCCAGGTT CACTCGTCTT ACAGCAGTCC TAAAGAGCCG GCTGCCCTTT CCTAGGCCTT CCTTGCTCTT NAGGGCTAAA  
TTCCAGCCCT CCTACCCAG TGCCACTTGG GTAAAAATAC TCTGCTCTC TCACGTTTGC TAATAAGCCC GGGCTCCGAC  
TACCACCGTT CGGGGAAGG GAGCCCCCTA CCGTCATGTC TGGGTCCGCT CCGGGAAGAAC ATGTGCCGGA CTGACTTGT  
GCGGCGGCAT CTTTCCGGA ATGCGGTTT TGTTCCTTC TAAGGGTGT

SEQ ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCAAAACA AATTGTGGGA GAAACACACC TTCCCAGCAA TAGAAAATCT CTATAAAGTG CATTTTGCCT GCAACCATCT  
CTTCCCCATG CTGGCCCTTG GGTCAAGATT TGAGGCACTG TTCGAGGGA GCCCTCAGGG CCACCTGAGC TGGGAGAAGG  
GAGGCATGAA GCCACCATGG AGCTCCAGGC TACTGGACAT ACCCTCTCTA CCCTCGCCCTT CCTTNTGGC TCCAGGAGTG  
CACTGCCCTGA CTCCACTGGC AGGTTGATCT GGAACGGGC TNGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEQ ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCCAGACCCA GAATGTAAAT NAGGCCAAA TGGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGTAT CTNTGAACCT  
GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTTCACAG CTCAGAATCT GGAGTCCCGG ACAATAATTC GGGGCAAGAG  
GACCCGCAAG ATTAATAACT TGAATGTGA AGAGAACAGC AGTGGGGAT CAGAGGCGGG CCCCACTGGC TTGCAGGGAC  
CTGGGGTCT GCACCAATTC CAGTGACCAC TTCAGAACCC ACCTNGGNC ACCCCCCAAT GTGCTCTGGC AGACGGCATT  
GGCTT

SEQ ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTTT AAATGAAACA CAGTTTTCTT CATGTGTCTC ACTCAGGCTT CAGGGCAGAG GGAATGGATT  
TTTAGACATA TCAAGACTC AAAAATTAA AGAAATATAT ATATGATAT ATATACTTCT AACATTTTAT GGAAATTAAA  
AATCAGAGGC TTTTGGTCTC TCCATTTACT CTAGGTCAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCCTCTCTA  
GACCCCTCCT TCTCCTTTGT CCTNIGTCCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGTTTCCA  
GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCCGTGAAC ACACCCGTCT ACTGNCAGCT GGAGCCCAGG GCCTGTNACA TCCTGCTGGA CCAGCTGGGC  
ACCTACGTTT TCACGGGCGA GTCCATATCC CGCTCAGCAG TCAAGCGGCT CCAGCTGGCC GINTTGGCCC CCGCCCTCTG  
CACCTCCCTG GAGTACAGCC TCCGGGTCTA CTGCCTGGAG GACACGCCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC  
GGACTCTGGG CGGATACTTG GTGGAGGAGC CGAAACCGCT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEQ ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTTCCAGCTG GCAGCCAGT GGGCCACCA TGTCAGCAC TTTCCAGTGG GACTCTTCAG TGGCAGCAAG GCCACCTGAG  
GCCCTGNTC CCAGCCACTT TCCTCTCTGG CACTGCCACC AGCCTCACCG AGTGGGCGA TCTGGGCTCA CTGCAGCCTC  
TGCCCTCCGG GTTCAAGCAA TTNTCCTGCC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GCGTGCGCC ATGCCAGCT  
AATTTTGTG TTTTGTAG AGACAGGATT TACTATGTT GGCCAGGCTG GTCTTGATT CCTGACCTCG TGATCCGTNC  
TCCTCAGGCT TCCAAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEQ ID NO:2157: (Length of Sequence = 351 Nucleotides)

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CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA  
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC  
CCTCTATCCC TCCCAGCACC TACTACATCG NCCTNCACAT CCCTGATTCC TGTGTGTATG GAAACINTTG CCAGAGATGG  
AGGTTCTCTC GGAGTATCTG GGAAGTGTGC C

SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTCACA GGAATCAGA GCTCAGCCAG  
GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAACCTCAGT CTGCTCAGCC AAATCAACAA TTCAACCCAA  
CAGGNCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG  
GAAGCTGGAC TATCAATTCC CAGTAAAGT GGGGAAAGG

SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTTGTGCGTT TCTCCTACCA GATTGTGCAT GCCTCCTGTG GGCAGAGCCT GINCTGACTT GCTCCTGGGT CTCAGCATC  
ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTTCACACT GTCAGAATTG AGATGAAGGA AGCCCAGAGA  
AATCAAGTAC CCTCCACCAG GCAGAGCAAA GTCCCTGGGTG CCCAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG  
AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC  
TGGGCACCAG GGGTGATGCA GT

SEQ ID NO:2160: (Length of Sequence = 376 Nucleotides)

ATCTTAAGAC ACATATGGAA AACAATAGGG TAGAAGTTAG TAACTACAA GAATATAAAT TGGAGCTAGA TGAAAAGGCA  
GTGCAGGCAG TAGAAAAATT AGAAGAAATC CATTTACAGG TTAGTTTITT AAATCAGGTA AGTTTATCTG TAATGTGCTT  
TCATTTATTT CACCGCAAAT TATATTTTGG ATATGTATAT ATTAATGTTT CTCTGCCCTCT CTGTAGCAA TTGTCTTTGT  
AGAGTTCTAG AAAAAAATG GCATCTGTTT TTCTTTTAA ATATTTACAT TTCCATTATT ATTATAACAA AATCAATCTT  
TCAGAGTAAT GATTCTCACT GTGGAGTCAT TTGATGATTA AGATCCAGTT GGCATA

SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTTCCTTCG GTTTCAACTG GACTTCTATC AGGTCTACTT CCTGGCCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC  
TATAAACTCT ACCAGCATTA CTACTTCCTG GAAGGTCAAA TTGCCATCCT CTATGTCTGT GGCCTTGCCCT CTACAGTCCT  
CTTTGGCCTA GTGGCCTCCT CCCTTGTTGA TTGGCTGGGT CGCAAGAATT CTGTGTCTCT CTCTCCCTG ACTTACTCAC  
TATGCTGCTT AACCAAACTC TCTCAAGACT ACTTTGTGCT GCTAGTGGGG CGAGCACTTG GTGGGCTGTC CACAGCCTGG  
CTCTTCTCAG CCTTCGAGGN CTGGTATATC CATGAGCACG TGAACGGGC ATGACTTTCC CTGCTGAGTG GATCCCAGCT  
AACC

SEQ ID NO:2162: (Length of Sequence = 339 Nucleotides)

CACTCCTTT TTGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAAGCA  
ACTTGGCATT TACTAACTT AGGCTAACCA AAACCCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC  
CAGAGACCC ACCACTGGGG TATGTTTLAG GCCAATGGAG CAAATTCAAA TTGGCTAAA AGAAGAAGAA ACTCATTTAG  
TATGGCAATA ATATTTGCGT TCGACACAAA GTGGCAAACC AACACATTG GCCTAAACAT GGTCTATAT GTTATAATGA  
TACTTTACAA TTAGACTTC

SEQ ID NO:2163: (Length of Sequence = 285 Nucleotides)

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CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTTCGAAA CCCAAAAAGG CTGTGCATTT  
 GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCGTGTTT TGTGGACAAA GCAAACGTGT GAATGGCTTC TCGGTGTCIG  
 TATAAAGGA CAAACGGTTG CATTCACCCT TTGTACTATA ACACCGCTTC TGCATCGCC ATATCGTTT TTTAACCTTT  
 TTGTCTCCG GGAACCTTC ATTGATTAT NATGTCTTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGTTTGTA ATCACTTCCT TTCTCTACAA TATTCTAAT AAGAAAGCTT ATAACAGCAC TTTATTGACA CCCTCGGACC  
 CGGGGCAGG TCAGCAAGAC TCCAGCTGG CATCAGACTG TGTCTGGCCT GCTGTGCCA TCCCTGAGGG GTGCAGGACA  
 GAGCCCCATA GGCAGAGAG GCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC  
 TAGGAGGAGA GGTGGGCTCT GGCAGCGGT GTNAGGTGGC AGTGAGAAGC CAGGCC

SEQ ID NO:2165: (Length of Sequence = 310 Nucleotides)

GTTTTTGTA TGTTTTCAA ATAATGTTT TCTGTGTGTG TTTTTTINCT TTTTTTGGAC AGGNTCTCAT TCCCATGCCC  
 CAGGGTGGAG TGCAGTGGTG CGATCTCAGC TCACTGCAGC CTGACTTCC CAGGTTGAGA TGATTCTNCC ATCTCAGCCT  
 CCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTT TGTATTTTGA GCAGAGACGG GGTTTTGCCA  
 TGTGACTCAG GCTGGTCTCG AACTCCTGGG CTCAGAGAT CCGCCTGCCT TGGCCTCCCA AAGTGTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAACT GGAAAAAAA TAATTGTAA GCAACAATT TAGATTTTTT TATGGAGGAT AGAGACATTT GAATCAGATA  
 CCAAGAAATG TATAGTAATC ACTCACATAG AAAGATGTCT AAAATGGATT TTAAATGGGA TCGGGGAAAG CAAGGTGCTG  
 AACAACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAA CTGATGTGAG TACTAACACA GGTGAAGTG  
 GGATTGTGGC GGAGGGGAGA GGTAGTINAGG GTAGACTTAT TTGTACCAAT TTNATTTTGG ATATTTCTTT TATATACAGA  
 TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCCT T

SEQ ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCTGGGCTG TGCTCTGTTT GAAGGGGGCG CCCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC  
 CTCGGGTGA TGGCCTCTTC CTCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTCTCTC TCCGAGCCCC  
 AGGCAGCGGT GATTGAGCCC TGCCCAACCT GATTCTNATG ACTGCGGATG CTGTGACGGA CCCAAGGGGC AAATAGGGTC  
 CCAGGTCCA GGGAGGGGCG CCTGCTGAGC ACTTCGCCC CTCACCCCTG CCAGCCCTG CCATGAGCTC TGGGCTGGGT  
 CTCG

SEQ ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACCGT TCGCGGAGGA AAGGCGAACT AGTGTGGA TGGCCACCAA CTGGGGGAGC CTCTGTCAGG ATAAACAGCA  
 GCTAGAGGAG CTGGCAGGC AGGCCGTGGA CGGGGCCCTG GCTGAGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT  
 CCTCGAGGT GTGAGCTAT GCCCCATTCA CGCTCTCCC CTCACTGGTC CCCAGTCCC TGCTGGAGCA AGCCTATGCT  
 GTGCAGATG ACTTCAACCT GCTAGTGGAT GCTGTGAGC AGAACNGT CTTCTCTGGA GCAAANTCTT TNCAGCACC  
 ATCAAACAGG ATGACTTTTA CCGCTCGT

SEQ ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTTGTGA GGTCCAGTTT GGGTGGCAGA AACTAAGACA CTGAGCTGAT GAGAGAACTT GTTGTCTTTC GCCCTGCGCA  
 TTTATTIATT TATTIATTTA TTTATTTTGG TATTTTGTAGT AGAGACAGAG TTTCACCATG TTGGCCAGGC TGGTCTCAA  
 CTCCTGACCT CAAATGATCC ACCCACCTCG GCCTCCCAA GTGCTGGGAT TACAAGTGTG AGCCACCATG CCGGCCACC

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TGTTGCATCT TTAACAGCTG TGTITGGAAA AGGGTGAGGA ATTGATTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG  
AATGCAGCCA ATTGTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTTGTTGTTG ATGCTGTGTG TGTGCTTTC TGTTGTTTT TCTTGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA  
CCAACTGAT GCCAGTAGGA TTGCCCTTGT ATAGGGTGTG TGACAACCCC TGTGAGGGT CTCACCCCTGT TGGGTGGCAC  
ATGGAATAGG ACCCATTTAA TGAAGCACTT TTTCCCTTGG TGGAGGTAGT GTGCTTTNCT GGGGAAAAAC CCACCTGTCT  
GGGCTGCCTG GATTCTCTAG AACTACCAGG AGG

SEQ ID NO:2171: (Length of Sequence = 357 Nucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG  
CAACACTAGT AAAAATTAC TACTTTGATA GGTGCACATC TTCTTTGGT CAGCAATTTT CTCAAAACCA CTGTAACATT  
TTACTAAAT GCTAAGCTTT GATTGTTTT CACTACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA  
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCCTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT  
GAACACACAC CTCACAAAA TTACAAATTA TCTTCCA

SEQ ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGGCC CATGGAGCTA AGGCCTCAGA ACACCAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG  
CAAAGTGGCC AGCTCCCATG CCTTTGCATG CATTTNCTT TACCTCCTGC TGCTGGGAA CATCCTTCCA GGAGCAATCG  
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA  
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAATAT CCAGGAGTAG TGTCAAACAC  
TAACACCATA TTTACAAGTC TAATTTGGAA CCTGGGCCCT TTTAAGTGC AGGAGGAAGT T

SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCCGG GAGCGCCTGA AGGAGCTCGT GGTCCCAAG CACGTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG  
GCCTGCTGGA CAACCACTCC TCGGAGTTCA ATGTCACCCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG  
TACAGCAACG AGAACCTGGA CCTNGCGCGG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA  
ACGCATCTTG GAGTTCATTG CCGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCTT  
GGCGTGGGTA AGACCAGCAT TGCTCTGGTC C

SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG  
CTCGGTGGCT CCACTGCCAG GTCCGGGCGC GCTCCCCACA GCGTCAGTT CTGGCCAGA CAGGGCCTGA CATCCGCCG  
CTGCACTCCC GGGGTGGCGG TCACCGTTCC ACGGCCAGNG ACTCTNCCTG CTCGTCCGGG AAGGCGATGT CGAAGATCTC  
CGGTAGTNT TCCACGAAGG TAACCTCCAG GGCCCTCGGT GATGAAGGCT TCCAGGTCGT AGAAGTCC

SEQ ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTGCCCAAG GGCCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGINTGAG GCATCCTGCC ACCTCCATCC  
AGACCTGGAG CAATCCCTGA GAAGGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT  
GTCCAGGCA ACCAAACAGC CATTATCAG TAAGGAGCCA GAGTNAGGCG TGCTAGTTCA GCCCCGGAA GGTGGTCCAG  
GGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTCCAAC TGAGCCTGAT TCACTCCAG TGTCCACAAG GGACATCCTG

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ACCTGGAGGT CCTCGGCTAC TCACCCTGGG GGCINCTTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCCCTC TAAATGGTTC  
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTIN CTTAAAAGTA CAATAAGCTT  
AATAGTGTIT TAGGAAGACA AGATAAAAAT TACTCAAGSC TAGCTTGGTT CTCACTGAAT AAAAACAAAG GACTAAATAC  
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCCTTGGT CGCTATATG GTAATCTCIG GGGTAGTCAT CCTGGTACTC  
GCCATGATAC TCATCAGGGT ATTCTGCCIG ATAATCACTA TCACTGATTT CCGAACCAIT TGTTCCTGTT CCTTGGCTTC  
CGTGTGAAT GACAGTTTCT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGTTTTTATA AAAATCAGAA TTTTTCAAAT GCATTGGTCA TTTTCAGATG CATTTGGTCAC ATTTCAITAT TCATATCAA  
AAAAGTGCAT TTGTAAATGT CACACAAATC TCATTGGAAA GGCTTCAAG TATGTGAAG TTGTCCAGGT CACAAAGATG  
AATGCTAGTT TTTCAAAATT CTACTTTTAA CTGAATGCT CAAATCTTAT AATTTGTAAC CCGGTCAGTT TTTCTTTAGT  
TGATAGGCTT ACTGCTTTTA TGTGTGAGA ATACTTGCT GTGAAACATC CAAATCTGGA AG

SEQ ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT  
CAATTCCTCT GCCTCAGCCT CCGAGCAGC TGGGACTACA GGTCGTCGCC ACCATGCGCA NTAGGTTTTT TTTTGTAGA  
GACAGGGTTT TGCCATGTTG CCCAGGTTGG TCTCCAATC CTGAGCTCAA GINATCTGCC TGANGTCTG GGATTATAGG  
TGINAGCCAC CACATCCAGC CTCCTTTTAA TGTTTTGTG ATTATTTATA GTGAAAGATT TAAATTCCTT TCTATTCCT  
TGIGGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TTCACAGTAG GGTTCATGCT  
CCTATGAGAA CCTAATGTTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGTAATGCT CACTCACCTG CTGCTCACCT  
CTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGGTCTGC GAGTTGGGA CCCCTGCAGG AAGTCTGTGA  
AATGCATGTC AGGAACTTA CTGTTTACAG CCACATAGTT TGTAGTAGTA AGGAACTAG GACAATTCAA ATATTTCATCA  
NCGGGAAAC TGGGATAAT TGTGGGTCAA TTTCATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTTGCT TTTCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCCCTA AAACACCTGG GCTCCTTAAG  
CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGNGA GGGGTCCCA GCCAAGCTCT GGNACGGCCT  
GCCATGGGGC AGNGCCTGAC CGTNCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TTGGGTGGGA ACGGGCCCGG AGCGGGAGGA ACGTGACTCC CCAGAGGGAA GATGGGCATC ATACTGGGCC CAGAGCTGGG  
AAGGAGTGC TGCCAGCACA GGGTGGGCCT GGACTCCCTT CGCCCCCTACC CCCAGTGGTT GTGGCTGTAG CCCTAAGCCT  
GGAGAGCAGG ACGGGCCCGG GGTGTNNGN AGGCTGCCAG GTGCCTCCCA GAGCTCCCA GGGCCCCAC CTGCAAGTNC  
CAGC

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

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CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCATTTCAGC CAGTCTCAAC ACAAACACC CAACAGGGAT  
GCACTCAACT TGTITGGTTC ATGTGGAACT AGGTGGCAGG GCGAGAGGA AAGTAGTAGA AGGGGGCTAT GGTGTGTCTG  
CATTAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA  
CATTATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAGT  
GGTGGGAGCC TCCTCTGGTT TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TTNTTTATAA ATAATAGATA  
TTATAGGTAT ATTTCATAT TTTTACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC  
AATTGCAAAA TGTTTAAACC CTGGGAAGCT TTTGCTTAGG AGGGCGGATA TTCTGTGTG ATGTTATCT ATAGCCATAA  
ACTTCCCTGA ATTINCTGCT AATGTATCCA AGTCCAGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAATCCTA  
TGAATATAAG TCAACCCCT CTGCCGTGC TGGTAATGAA ACTCTGGGG CATCTACCA AGGTTATCCT CCTCCTGTG  
CAGCAAAACC TACCTTTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAGAG  
AGCAGTGAGG AGCAAGATAA TGCTCCCAA TCAATCTGG GGCAAGTCA AAATATTTGA GGAAGATGN TCCACAAGGC  
CAGGTTACAG AGGAATGCAA GGAGCTTCCA GGAAGCACA GAATTCCAAG TTTTCGGAAA TTT

SEQ ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCACAGCA GTCAGGAAG TGGGGAAAGG GGAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA  
CATTAATTGT TGGATTTTGA ACATGCTACC ACAATATATA CAGTAAAATA CCTCTGGGA CAATGTGACA AATTTTGT  
CCTTTAATT TGCTTTTCTG GTACAGGTAA GATCATTTTT AAATCACTTT TTINCTTTAA ACATGAATAC ACAAAGAAA  
TGGTTAGAAG TTTCTTGT TTAATAAGC ACAGAAATGG GGAGGTTAA AACACATTTA TAGTGCTGAA TACCAATTGG  
NCATCACACT CTATACATTT TTTGCTCAA TTCTGTAC

SEQ ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGTGGT ATTGTCTAGG AATAAAAGGG ATAATTTTG TGTTCACAA  
AAGTAACTTG TCTAGACCA CACATCAGAA AAACACAAA ATAGCACT CTAGTTCTAA ACAGCTATGT CTAAAATAGA  
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAAACAG ATAAATATTT GCNCTGAGTA GGCTGTTTAT  
AATATAACAT TTINCTTATCT ATACAGAATG AAAGCCAAA AGTTAACTGT ATAGAGATGT GCAGAACAAC ATTAAATATT  
ATGGCTCAA AGCAGGG

SEQ ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCATTINTCA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCCACTCC ATGACTGTTA ATAATAACAA TAATAATAAA  
ACTACTGGCC AAGCAGGTG GCTCATGCCT GTAATCCCAT CACTTTGGGA GGTGAGGTG GGCAGATCAC CTGGCCCAAC  
GCCACCGCT CTAGCTCGG GCTCCCTGAG GTCCCACTG CCCTNNCCGG TCCACGGCT CCCACGNTG CACCCTGTCC  
TGACTCGCCA CCTGGTCTTG TGGGCAGACT GCTGATCGAG TTCACCTCAC CCATGCCCT GGAGGCGGT GCAGAGGGAG  
AACCAGGC

SEQ ID NO:2188: (Length of Sequence = 335 Nucleotides)



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GGCCCCAGCT CCTCTTCTG CCTCTTNAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGT CAGACTGTGG  
 GTCCCTGGT CTCTGCCCC CTCTNACCG GCTTCTCTCC TCACGCTTA GGGTCTGTCC CGGGTACTCA GTACGCCAG  
 TGGGATCTTA CCCACTTCCC TGCAAGGTGC ACCTGCCCCA GGCTCAGGCT GCCCAGCGGC TCTTCTTGA CAGTAAGAGC  
 AGGGCTGGGC GCCTCTTTC TGGCCCGAA GCGCAGGGG CCCCTCTCC AGAGCCTNGG CGCAAGGAAC ACAAGGCTGC  
 CGCTGCTCTT CCAGG

SEQ ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACTGGTGGA TCAGATCGAN TTCTACTTTT CTNATGAAA CCTGGAGAAG GACGCCTTT TGCTAAAACA CGTGAGGAGG  
 AACAGCTGG GATATGTGAG CNTTAAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACCAC  
 AGCAGATGCT TTGAAGTATT CAGTGGTCTT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCGTCCA  
 CTGTTCCCA ACGAGAACCT CCCAGCAAG ATGCTCTGG TCTATGATCT CTACTGTCT CCTAAGCTGT GGGCTCTGGC  
 CACCCCCAG AAGGAATGA AGGGTGCAAG AGAAGGTGAT GGAACA

SEQ ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCTTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT  
 AATCCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGA GTTCGAGACC AGACTGACCA ACATGGAGAA  
 AGCCCATCTC TACTAAAAAT ACAATATTAG GGGCGTGGT GGTGCATGCC TGTAAATCCA GCTATTGGG AGGCTGAGGC  
 AGGAGAATCG CTGAACCTG GGAGGCGGAG GTTCAGTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA  
 AAATCCGTC TTC

SEQ ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGTTTATAA AAGTTTGATT ACTGAAAAG TTCATCTAA TTCAGAAAT TCAGGCCAA TGAACAGCC CCTTCAAGCA  
 AACATGCCTT CAATCTCTG AGGCAGGACA ATGATTCTA TTCCAGNGT TCGAAATAGC TCCTCAAGTA CAAGTCTGT  
 TTCTAAAAA GGCCACCCC TTAAGACTCC AGCCTCCAA AGCCCTAGTG AAGGTCAAAC AGCCACCANT TCTCTAGAG  
 GAGCCAAGCC ATCTGTGAAA TCAGAAATA GCCCTGTTC CAGG

SEQ ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACGG CTACCTGAG GTCATGGCT TCACCATGAC GINGTTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG  
 CTGACGAGT GTGCGAGGT GGTGCTCACC ACATCCAAG CCATCCCGT GCAGGTGGAT GCGAGCCCT GCAAGCTTTC  
 AGCCTCAGC ATCCGATCG CCTGCGCA CCAGGNCACC ATGGTGCAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG  
 CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGTCTCAGCA CTCGCTGGGT GACCCGCGG AGCAGGCAA GGAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGAGGGA  
 ACAGACCCAG GNTCTGGGA ATCTCTTCT GCTAGCTTT GCTGCTGC CAGAGCAGG CCTGCGGTTT GGGTNCGTIN  
 ACCNTCCGGG GGCGGGGGA GGGCAAGNA GCGGATCTC TGAAGTCCG CCCAACTCG CTNCTGATCC CCCAAGGTCA  
 GAGAGGG

SEQ ID NO:2194: (Length of Sequence = 399 Nucleotides)

CCTCCATCTC CCGGGTCAA GCGATTCTG TACCTCAGCC TCACAAGTAG CTGGGATTAT AGGTGTCCG CACCACCT  
 AGCTAATTT TGCAATGTTA GCAGAGATGA GGTTCGCCA GGTGGCCAG GCTGGTCTTG AACTCTGAC CTCAGTGAT  
 CCACCCACCT TTGTGGCCT CCCAAGTGC TGAATTACA GGCAACATGT AGCCTTGAG TCTAGCTTCT TCCACTAGCC

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TAATTCATTT GAGATTCCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTTTA TTGTCTCTGT  
AGCATTCTGT TGTGCAGCTG TGCCCCAGTT TGTTFANCTA TTCACTCTCA GTTGTTCICA GTTTTAAATGA CAACTTCAG

SEQ ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTTCCTGACC TGCAGGGCTT CAATTGTGTG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT  
ACATAAATNA TATGTNATAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA  
ATAAGTGGGA CT

SEQ ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAAA AAATTATTAT CTCCACTTTA CCAGTGTCTGA CACTTCACCA ATGTAGGGCT CTCAGTGA CTAGCCAGGGT  
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT  
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCCT TACTCAACAA GTATTTATTG  
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCTTGACCT TGACCCCTGCA TCCATAGTAT  
GAGCATTTTA ACTGGGGGAG GGTTCGCAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTTG TG CATTGAGTGC ATCCCGCTG GTGACTAAGC TCGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCCTC  
TCCCTTTGTG TTCTATACAT TGTGAATCTT CCCGCTGAA GAACGCCAG CCGCCGAGA CAAAGCCCCG CCTTNCCTCA  
AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGGAGGGG GGCTCAGAAA GGAGAAGGGG TGTGATCTCC  
GGTCCCTTCC CCCATCATCC TTCCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCATTAAG AGG

SEQ ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGTCTCACTA TGTGCCCAG GCTGGTCTCA AACTCCGTG CTCAAGCGAT CCTCCTGCCT CGGCTACCA AGGTGCTGAG  
GTTACAGGCG TGAGCACTGC ACCTGGCTAG GAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA  
AGAGAGAGTT CTGGGTTTCA GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTCGGCTC CACTGGCTGG ATCTCAGGGA  
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAGGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAAGA  
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEQ ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTTGGGTAG TACCCTTGCC CTCTTCATGG CCACTTCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT  
ATCATAAAGT ATTAATACTT TGTCAATAAG TCCTCCTTGA GCCCAGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA  
AGGAGCAAGG ACTTGGGCTT CTCCACGCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG  
GCTCAGAAA TACTAAAGCT GGGAGGAAAC TTGGAGATCT ATAGGTCAAA CCTCCCCATT GGGCTGATGA GAAAATACAC  
GCAGGCCTAG CATGGTGCCT GCCACCATGG TGGGATCCAG TATGGTTTTA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGC ACCTGAAATC CTTACTCAGG AGGCTGAGGC AGAGAATCGC.  
TTGAACCTGG GAGGCAGAGG TTGAGTGAG CCGAGATCGT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT  
CTCAAAACAA AACAAGCAAA CAAACAACAA CAACAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAGTG  
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAA GTGATTCGTG ACTCATGTG

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TCCTCAGTCT ATAGCATTAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG  
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTTCAA AATAAACCAG CATAACAGACC AATTGCAATT TATAGAAAAA ATAAAAATGT AGAAACATCA  
CCTCCTCTCC CCGACCCAG TACTGAAATT ATACTTCTC AGACATACTG CCCCATCACT GGGGAGGGTG CCGACAGATT  
GGGTACATTT ATAGANTATT AAATAATTAA GTAACAGAGG CACCGTTTTT GCATGTATGG TCCCAAAGAC TTTTCAACTT  
NTTTTCAAC ATTACAGTTG TTAAGAATGG AAATTGAAGG AATTGTACAT ATTTTCACTG GCAGTTTCTT ACAGA

SEQ ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCTCTGTAC TCAGCCTGGA GTGCAGTGGT GIGATCTGG CTCACAGCAA CCTCTGTGTC GCAGGTTCAA GCAATTCTCA  
TGCCCTCAGGC TCCTGAGTAG CTGGGATTAC AAGCATGCC CACCATGCCC AGCTAATTTT TGTATTTTGA GTAGATACAG  
GGTTTCGCTT TCCTGACCTC AAGCTATCCA CTGCTCTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC  
CTGGCCGGAA TATATATATT TTTTACCACT CTATTCCAG TGCCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT  
AAGGAAGG

SEQ ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTGTGCT CGTCGCTCAT GCCACCACAG GGACCNACGG GGTT CCGG AGTGGTTTTT CTGGCTTGTT TCAGCCTTTT  
CAGGCTCTCT TCCATCTTCT TCACAGAGTT TAATACATCT GACACGGTTT CATAGTACTT ATGAGTGCTT TCACTGAGAG  
TGCTTCTAG CCACTGCTGA ATTATGCTT GTTTGAGCTT ATCCTTGCTT CCGCTCTGAA GCTGGAATAA GGGCTTCANA  
GCACGTCCA CATAGGAGGA AGCTTTGG

SEQ ID NO:2204: (Length of Sequence = 353 Nucleotides)

GTAAATCINA GGTCAGGAT GTCCCATGAT GGATGATGAC TGANATGGAC GGAAGTTTGG TTTGAAGCGG TGGCAITGGT  
GCAGGCTGGC AGAGGGGGCA GTTCTGGATA GAGTGTCTG ATGAATGGGG ATACTCATGG GAGGTGATGC AGATGAGGAT  
TCNTGCTTC TNAAGGAGGA GCCAGGCATT TAGAATGGCA CTGGAGAGCA AGGACTGACT GANCCCCCTC ACTGTGTCCC  
CAAGAGGCCA GGAAGGGAAG AITGGAGGAG ACAAAGTTGA AGTGAGTTTT CCAGGGAACG AGTCAGTTAA GAGATGGTAG  
GATCTTAAGG GAAGATGGCT AAGATCTTAA GGG

SEQ ID NO:2205: (Length of Sequence = 265 Nucleotides)

GTTCACCAT GTGGCCAGG CTGGTCTCAA ATTTCTNACC TCAGGTGATC CACCCCTCCT CAGCCTCCCA AAGTGTGGG  
ACTACAGGCG TGAGTCACTG CCGCCAGCCG TGGTTTTTTT TTTTLAGAAA CAGTGTTTTG CCATGCTGCC CAGGCTGGTC  
TCAAATCCAT AGGTTCAAGT GATCTCCCCA CCTCAGCCTC CCAAAGTGTC GGGACCACAG GCATGAGCCA CCATGCTTGG  
CCAGAAAGAA GTGTGAACA AAATG

SEQ ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAAGCITA TTTTTCAGT TGTTGGCTCT AGTTTGGTTG GGAAACTATT TCCTTAGACC TGGGTCAACC CTCGGGCTCC  
CTTAATCTCC CGCCATAATG TCTCCAGAAT CAGGGCATGG TGTCTGCCC TGGTGGGACT CAGCCCGGTT GCTTTGCACA  
GACTCTGGC CAGGGCAGGA TGTCGGTGT TCGCGGGTGT TCGCGGGTG TTATCTGTGG CGCTCAGTAT GGTGCATAGT  
GTAGACACGT GCCCTAGGTG GTGTTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGGC ACAGTGGCTC ACGTCTATAA  
TCCAGCACT TTGGGAGGCT

SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GTGTTTGTGTT CTCTTTCCAC CATAATTGTA AGCTTCCTAA GGCTCCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT  
CTGTCCITTA TAAATAACCC AGTCTGAGGC AGTCTTTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTTCTTGAGT  
CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGACTTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT  
TTNTGGAGGC TGGTAGTGTT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG  
TGTATTATGA AGGATCTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCCTGCT GTGCACATTG CTTGAGATGG CTAATTATAT CTTTGGACTG TTTGTACAAC CATTGACAAA TATACTTACT  
TTCATTTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAAA TTGAAGAAAA ACAATAAAC AGNAATTAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGTTGAGA ATCCTCCATC CAGCATCTTC CCTGGTCACA TGGTCCCAAC CTTTGTCTCC ACCCCCTTCT CTGTTCCCCC  
CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC  
CTTCTGTATA GAGCACGCTT CCCATCTGTG GGACTTGTCT CCCATCTTGT GGACTCGGAG GGTTCGGAGC AGCCGTTGAG  
GTGANGCTCC TATGACACCT CCNCCGTGAA GCTTNCCTCA CTTTTCATT ACCAGTGAGG CCTGCCACAG CTTGATTGT  
ACTCTGATCC TGGCAGCAT GGAAGCCATC TT

SEQ ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCCTGG TTTAATGTTG TTGTGAGCCC  
TGTGGAAATA AAATTAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAAGCTAA GATGTATAAG  
ATGTTTATAA ATTTNCTATT AGAAAATACT GCTTCTTAA AGGTGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG  
CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA  
ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTTCTGGAG TACCCTCTTC CCCCACCCC AGACCTGCTT TCAGAGCAAA ACTCAAGTCC CTCTTCTTCC GTGAAGCTTC  
TCCCTCAGCT GAGCAGTAT CACTTACTCA CTCTTAACCC CAATCCGCTG ACTGGGTGGG GACAGCAGT CCAGCCTTCC  
CACCTCTCT GCAGGCTTCT AGACGGAGTT TCAAAAATG ATGAGCCTCG ATCCAGGGCT TGAAAGAAGC CAGGGTGTA  
TCTTGTTTAT GCATGCTTCC CCAGAGNCTC GCCCAGTGCC TGGNACATAG TAGGCACTCA ATAAATGCTG AATGGGTGAA  
TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGGCTC CAAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA  
AGAAGAGAAA CTTCTAGAGA GAACAAAAGA TCTCAGCCAA GAGTGAAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCA  
GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT  
CTCATTTCTAG GTCCCCCTCA AGATGTAGAC CAAAAAGTAA GAGTTTATCA TTT

SEQ ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGTGATAA ACAACTTTAA GCTTATGTTT CTTTATAGAT CACTGGCTCA CACATAATTC AAAACCCACA  
CAGAAGCTAA GAGTCTTTAC ATTAAATATA TTCTTCCTAA AAATCCTTAC TGTATGCATC TGTCCTCAAG CAGTAAATTT  
TGATTATGCA CCATTTTATA ATTAATATGT CACATTTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACCTA

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AACCCCTTCT ACTTCGAGC TGGGGGTAGG GGCACACT TGGGATTGGT TCTTCAAGTA TATATTTTIN CCAAACATTA  
GCTTCAGTGA AGAGTTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAAGACGTCA CAAGGCGCAA  
GGTACATAAC GGTGGGTACA TAT

SEQ ID NO:2214: (Length of Sequence = 259 Nucleotides)

GTCATGGAGA TCCACAGCAA GTACTNGCGC TGCCTGCAGG ANCAACCTCC ACAGCGGGGC GTTCTCTGAT CGAGGCTCAG  
ACTTTCGAGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTCGCTNTC CGTGGGCGTN AAGCCCGCCG AAAAGAGACC  
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CCTNTAGCAC TNCCTCGAAG NIGCTGTCT CTGTCTCTGTC TGCTCTCTGTC  
TTTAAGCTCA GCCAAGAAA

SEQ ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCACAG AACTGCTGG ACACACTGAA GAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA  
AATAAGTGC CCCTCAAAA CACGNCCCCA TCCCACAGCG CTCGCAGCT TCCCACCACC GCGCGCTCA GTTCCTTTGC  
GTCTGTGCCC TCCCCAGCCC TGCAAGCCCT GGCCTGGCACT GTTGCCGCTG CATTCCTGTC TTCAGTGAAG CCTCTCTCTT  
GTTGAANCA AAAGAAAATA ATGCATTGTC TTTTITTAAG AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT  
CATGTGGCAA TTGGTGACA GCAGGAGGAA ATTTCTTGGG ACTTNTTTAG GNTGAATT

SEQ ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT  
GGAAGAACTC AACTGGAGA GAAACCTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCGG GCCTTAGTAT  
GCATGTACGA TCTCAGTGC GAGACAAGCC CTATGAATGT AAGGAATGTC GGAATCCCTT CCTTACATCC TCACGCCCTTA  
TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTTGAA TGTGGGAAAG CCTTTGCAGT TTCTTCAAT  
CTTAGTGGC ATTTNAGGNA CTCACACTGN AGGAGGAAGG CCTCTGAAT NTNAGATATG TGGGNAAGT ATTTTGGGGA  
ATCCCCCAT GTCTTTAATA ATCCCCAT

SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GTCATCAGAG TTATCGTGA ACACCTGAA TGCCGGCTCG GGGGCCCTGT CTGTACCAT TGATGGCCCC TCCAAGGTGC  
AGCTGGACTG TGGGAGINT CCTGAGGCC ATGTGGTAC TTACTTCCC ATGGCCCCTG GCACTACCT CATTGCCATC  
AAGTAAGGTG GCCCCAGCA CATCGTGGG AGCCCCCTCA AGGCCAAGGT CACTGGTCCG AGGCTTTTCC GGAGGNCACA  
GCTTTNACGN NACATCCAAG GTTCTTTGTC GGAGACTNIN TACCAAGTCC TTCTTAAAG CCGGGGGCTT TCAGTTTACA  
AGNTTCCATT CCCCAGGTT TMTCTTCAA AATNNCCAGC AAAAGGTGGG TTGACTNGNG GGCCCCINGG GNTTTTCCCA  
GGGCTTTC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAT ATAGCTTAT TTATAGAATC TTACAAATAA AACATTTACA GTCCACATAA GTTAATTINC TTTCTAATT  
TCTTCTATA CACCTGAGTT ATTTAAAAA ATACTGTGAT GGAAGTGCAG AACTGTAAAG GGAAATAAGA ACAATAAAT  
CCTAACCTCT CTTCAGAAA TCAGACAACT TGTITTTAAA GTAGATGCC AGCATATTGC CATCTTTTG GAAGAGGACT  
TACTATCTC AGCTTTACG NTACCCAAAC AGAGAAGCCT TCTTTTAAA ACCCAAGGT AAGGGCCAG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GGCTTCTGT CCCACAATT TCTCAGGTG GGCCTGGAC ACAGCAGCCA CCACAGTCCA GGCTGCAGG GCAGGGTGTG  
ACCTTGCCCG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTGGGAGGG GGATCGTTCT TTGGGCTCAG TCTTCCCTC

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CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCOAAG  
GCTTCAGAAG CGGCCTCACC TCTNGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTC AAGACACTT

SEQ ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA  
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC  
CAGCGTCCCC TCCAGTCTGC ACCGGGCGAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC  
CCTCTATCCC TCCCAGCACC TACTACATCG NCTTNCACAT CCTTGATTCC TGTGTATTATG GGAAACTNTT NCCAGAGATG  
GAGGTTCTCT CGGAGTATCT CGG

SEQ ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCAGTAGCG CAATCTTAGC TCAGTGCAGT TTTGACCTCC CAGGCTCAAA TAATCCTCCC  
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTGTGT AGAGATGAGG  
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCCAGNCTC CCAAAGTGCT  
GGGACTACAG GCGTGAATCA CCGCGCCTGG CTTTGTTTAA GGCATTCTTT TTCCGCAGCA TCTGTTACCA GCAGCCTGAA  
GNCATTCTTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GTCTCCTGTA AITCCCCCAA ACGGTTCTT GAGGATGTGA AACCAACTTA TTGGGCTCAA TCCCATTGG TCACAGGATA  
CTGTACGTAT CTNCCITTCC AGAGATTGA TATCACCCAG ACACCGCCAG CATACATAAA CGTGTACCA GGTITGCCCC  
AGTACACCAG CATATATACA CCCTGGCCA GCCTTTC

SEQ ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTT GCATTTTAG TAGAGACGGG GTTTCAGTGT GTTAGCCAGG ATGGTCTCAA TCTCCTGACC TCGTGATCCA  
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGCCAACT TTTTGCATGT TTTCTTTAA  
AATTCTCTAC TTTTAATTGT ACTTCTAATA CAGACACTTC TGAAATCAGT TTTCACATTG CTGCAGCCTT ACCAATTGT  
AGANACTGTT TATGTGATGT TTTGATTCTT CATTTATATA

SEQ ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATTGCAGGC ATGAACCACT GCGCCAGTC GAGTGGTAAT ATTTTGAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA  
GAGGTTAAAA TACTGAGTAG ACCATGCTGT AAACAGATGT GCTGTATTTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG  
GCAGAGCTCA GAGTAGATTT AATGTAATC TGAAGGGCAC TAGGATTTTN AGAATGGTAA ATAAGCATTG GCTTCAACTT  
AAATTCAAAT CTGCATTGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTTGTTTTC TCCTATCTAG  
CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAAGGC TGTCTGGCC AGGCGCGGTG GCTCAGGC

SEQ ID NO:2225: (Length of Sequence = 420 Nucleotides)

GGTCGAGGAG CTTGGGCGG GCGGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG  
CAGTCAGGCG CGCTCGGACG CCGCCGGCAC CATGGGCTGC TGCACCGGAC GCTGCTCGCT CATCTGCCTC TGCGGCTGC  
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCCT TGGTTTCCAG TGGGCGCCTA TTCTTGAAA TTTTCTACAC  
ATAATAGTTC TCATATTGGG TTTGTTTGGG ACCATTCACT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC  
ATTCAATATC TCTGTACATC GGTGATGGT GAGAGAACAT GGGGCTGGT TGTNTCAAGA AGAGTGCTGC CTTCCCTCAA  
GCCCCATGGC ANNGATGGAC

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SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GTACCTGCTC CCTGCCGGCA CCTTINTTGG TGGATATTTA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT  
 ACCTAGGCTC GGGTTTGTC TGTGTCGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCCTGG CAATGCACTG  
 GGCATGATTG GGGTTGCTGG AGGACTGGCA GCCACCCTCG GAGTCCTAAA ACCGGGCCCCA GAATTACTAG CTCAGATGTC  
 TGGAGCGATG GCTTTGGGTG GTAC

SEQ ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCACCTGGG CAGGGGCGCT GGCACATTCC TCAGATTCTG GCATGTCTATC CTGGAAGTAC TCAGCCTGGC  
 GGTACTGCCA CAGACGCAAG TTCCCGTCCC ACGAATGCT GACAATCTTC TCTTCAAAGG GGTGCCAACT GACGTCACGC  
 ACACAGGCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA  
 GCCACTGTAG ATGAACTGCT GGGCAGTCT ATGAATGGGG GAGAACCGGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC  
 CCCGGTAGGT CATCAAGGAG CTGTCCCTG GAGCTTCAG TTTCCGCCAG GCTTTTITNG GGCACCTTCT GCCACCGATA  
 GT

SEQ ID NO:2228: (Length of Sequence = 394 Nucleotides)

TTTAAAGTGG AAACAATGTT TTTAAGAGGT GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGT TGATTCTATG  
 TGGTGGGAGG GAGGGGAGAA TGATTCTTTT TTCTAGAATC AGAGAATTTG GAAAGTATCA AGAAAGATAA TAACAGAAAG  
 CATGAAATAG AGTTGTGCTT TGAAGATGAA TTGGATGAAA TINTTATGTG AAGAGGAGTT TTCCAAAGTT GCAGACCCAG  
 GATTCCTGGC CAGAAGCATG AAAACGTTTC TTTCTTACTG TTTCTAGGAC CTAGGCAGCA TTTCTTCCAT GTCTGCAACA  
 ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATTCA TCTGCTTTGG ATCCCATGGA CAGTCATGGT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTTAG GATGATTGAG TGTTCCTTTA AAAATAAAAA CCCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA  
 GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGCCT  
 GGTCCGCCGA CGTCACAGTG GATGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGSCACCTGC GCCACGCAGA  
 GCAGCAAGGC TGAGCATGAC CACTGGAAAT AAATAAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA  
 AAACAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GTGGAATGCA GCCATCACAC AGTAGTTTCT GAGATTGCTT CCGTCTAGGT TTTATGGGAA GATATTTCTT TTTCTACCAT  
 AGGCTTCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGT TTCAAACCTG CTCTATCAA AGGAAGGATC  
 CACACTGTGA GTTGAATTCA CACATCACAA AGAAATCTCT GAGAATTCTT CTGTCTGGGT TTATAGGAAG AAATCCCGTT  
 TCCAACGAAG GCCTCAAAGC GGTCCATATA TCCACTTGCA GATTCTACAG AAACAATGTT TCCAAACTGC TCTATCAAGA  
 GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GTCTCACTTT NINGGCCAGG TTGGTCTCAA ACCCTGGTGC ACAAACAATC CTCCAGCCTC ANCTCCCAA  
 AGTGTCTGCA TTACAAGCAT GAGCCACCAT GCCAGCTTA AGGGGGATAT TTTTATAGAG CATCTTGCCC TGGTCTGGA  
 ATTCTCTGTA GATAATACAG TTAACAGATA TTCCCTAAG TGATTAGAA CCTTTCCATT TGACTGATT TNCAGAAAAG  
 TTTACCTATG TAACCTCAGT GGGTAGCACA ATGCCTGACA CATCTTTGNA GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

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CCTGCCACTG AGGCAGGTGC GGCCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG  
 TCCGGCCCTT GCTCTTTGAT TGTGGGCAGC CTCCTGCCCT CTCTGGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC  
 CGGGCTGGTT GGTCTTGAAG GCCCTTTTCC ATGCCGACAT CATGTCACTC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG  
 TGATGCTGTG GTTAAGTTTG CTTGACCCCA GCAGCCCGAG GGACTGTCTG AGTCACAGCA CAGCCCCTAT TCGTGGCTG  
 CTGGTGTGTG GGTCAATTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCACGATGCA GGCCACTNCG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT  
 GACCTGTTGT ATTGGCGGGA CATCAAGCAG ACGGGCATCG TGTTTGGGAG TTTCCTGCTG CTGCTCTTCT CCGTGACCCA  
 GTTCAGCGTG GTGAGCGTCG TGGCCTACCT GGCCCTGGCC GCACTCTCAG CCACCATCAG TTTCGCGATC TACAAGTCTG  
 TTTTACAAGC AGTCAGAAA ACCGACGAAG GCCACCTTT CAAGGCCTAC TTGGAGCTTG AGATCANCCT TTCTCAGGAG  
 CAGATTGAGA AGTACACGGA CTTGCCTGCA GTTCTACGTG AACAGCACAC TTAAGGAACT NAGGAGGCTC TTCTTGTCC  
 AGGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTUCC ACCAAGTGCA ACACCCINCA NTGTGCCITT TGGACCAGCA  
 CCAACAGGAA TGTATCCCTC CGTGCCCTCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTCTCTCTT CCGGACCATC  
 ATGTCCCCCA NCTGGTGGTC CTTATCCAGC CCCAATGTG CCGGGCCCTG GCCCCACAGG GCATATCTTA CACCAAATAT  
 GCCCTTTNCA GAGTACCCA GACCATATGG TGCACCACA GATCCAGCTG CAGNTGNICC TTTAGGTCCA TGGGGATCCA  
 TGTITTINTG ACCCTTGGGC GNCAGGAATN GGAGGGCAGT ATCCTACCCN GTAATATGGC NATATNCATN INCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTCC GCTTTGCGTC CTCGCTACAA ACGCCTGGTG GACAACATAT  
 TCCTGAAGA TCCAAAAGAT GGCCTTGTA AAAGTATAT GGAGAAATG ACATTTTATG CAGTATCTGC TCAGAGAAA  
 CTGGATCGAA TTGTTCTTA CCTGGCAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCIGGGTATG TTTTGATTCG  
 TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTA AGCCATTTGT AGAAAGCTTT CTTCATATGG  
 TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGAACA AATTCT

SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TGGCAAGAAC ACTGAAACCC AGCCAACTTC TCCTCAGCTA GGGACCAAAA CCTTTTGTG TGTAGTCCTT CCGAGGTGG  
 AGACTCTTCT GCAGCCAAGG AAAAGGTGCG GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCA GGAAAGCGCC  
 TGGACGCGAG TCTACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGCG GCCTNGGGAG GAAGGCCACA  
 CCCCAGCGAC GCTGTGCCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA  
 AINTGGGCGG GGGCAAACCG GCTCTTGTGC GACGGCACAC GCTTGGAGGA CCNCAGTNAG CTGATCTTCT GCATCGAGA

SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTTTAAAT ACAGTCTGAT CAGATCAATT CACATCACAA GGTCAACCNG GGCTTGCTCA CATGTGNAC  
 AACTGAGGNA CACAATGTCC CTACCTGCCG GCTGTCCAC CTTCCTGGT CCCAACAGCA TTGAAACCCC CTACTTCCCT  
 GACCAGACTG GCATTTTTTA AAATTTTGCA TAAACTATF TCTTCCATAG NCTCAAACA ATCAACTAGC CAAG

SEQ ID NO:2238: (Length of Sequence = 369 Nucleotides)



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ATTTAAGGCT GTACTTAACT AATTGGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG  
TCATGGTTGG TCACCTTTTA AAGTATTGA TTACTGCAAC TGGAGAATGA AAAGTGATA TTGGTGACGC CAACCTCAGT  
TTCIGAGCAC TCTGCTCTG TGGTGAAT CAGACAAAAA TTCATCGGGG TGAATAAAAAA AAGGCATTAC CTGATTACA  
CCCTGTCTT GCTAGCCCTC TTCCATTAT TTCTCACACA GCCTTTGCT CTGTTAAATC CTCTCTCTG CTCAGACCAT  
TGCTTGCCCC TTCAAAGGT ATGGTTCAGG CTCCTTTCAA GACATTTGG

SEQ ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATCAAGTCT AGCATTGCT ATTTACAACA AATAAATATT GCCCTCCCC AATCAGTAAA CAAACATTTT  
TTTTTCTTT TTGCTTTTA TACAAATATT CAATCACCCC ACCCCACCC CAAATCCTCC TTCTCACTA ACCCCGCTC  
TGCATGGTCT CGTAAAGCCC AGGACGCAGT GGTAATGGC ACTTGCACTG GCATGAGATT CAACATCGAT GGGACTCAGC  
TGGGACTGTC CTCACTCACC GGGTGACAG TCTGGTCCAT GAAGAGGGT TCTTCTCTG CTCCAGGGG AGGGCTGGGG  
TAAGCGGTGG GTGAGACTCC CTCACTCTCA GTTGGNCTG ATGATGGAAT CTTTNGTGCA GCCTGAGAAA GGCTAGAGT

SEQ ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTCAGAAT TCATCTCTGA CTTTAAAGGC TTAAGCAAGA ACATGGTTTC CGTGGCTCCC CCTGGACTGA ATGCTGGAGG  
ATATATACTT CACAGTCTGA GGCCTGGTCC CAGGAACGTC AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT  
TTCAGGATGG AAGTTTGATT CTCAGATTG TGACTCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC  
CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG  
CCTCAGTGCC TGANCCCTAG GGGGATTGCA GTTGGCTGCT GGATTCATT CCTGCAAGCA GGCTGCA

SEQ ID NO:2241: (Length of Sequence = 377 Nucleotides)

CTCCATTTTG TCCTAGTTAC TTTTAAAGGTA TAAGCTGAAG TCATTGATTT GAGATGTTTC TNCITTTCTA ATATAGGTGT  
TTAATGGTAC ATATTCTCC CTAAGTACTG CTTTAGTGGC ATCCTGCAAA TTCIGACATA CTGIGGTTCA TTTAATTCA  
TTACAAAATA CTCCTAATT TCCCTTTGA TTTCTCTTT AATTCATGGG TTACTTAGAA TTGTTTATT TAATTTCNA  
GTACTTGGCG ATTTATCTCT CTCGTATT CATGTCTAAT TTAATCCAG TGTGGTCTGA GAATATATT NGATATCAAT  
AAAGCTACTC CAGCTACCTT TIGATTAAATG TTATCAGAT ATATCTTTT CTATCT

SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAACACAC ACACACATGA CAAACTCTAA GTCTCCAGAC AGACACCTC AATAGGCAC TTGGTGTITT  
CAGCTGGGGG CTGGAGAGAT CTGGGCTTT GGCCTCAAA GGNAGGAGCT GCTGTCCCA GAGAGGAGAC AACAGCTTCT  
GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCTAGGTA GATGGGAAGG GGGCTGTTT AAAGAAGACC CCCCACCC  
ACTGCCATT TCACCACAAC AGTGACTTGC TGAAGTTTT GTGCCCTCG GATTTCTGAA TATAGTGAC AGGCATTTCT  
AAAGAGCGCA TCATGAAGG GGCAGAGGCT NGCCTTAAA TGTGGGCTTT GCATGTTTG G

SEQ ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTTATT AAATCAGACT GTTATCTTA ACAGTTATGT AAGTTACATG TATGTTAAG TCAGATATT TCACATGGAA  
AAGTTTTTAA CTCCTATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACTGCTAA ACATTCAAAT  
AAGGCAAGTA TATAAACCATAAACAAT AATGAAAAA TTCAAGCATT CCTTAAGAG AATTCACAC TACAAGCTAA  
ATGTACTTTC TGAGTGTATT CGTATAATCA AGGCAGTGT TCTCCTTTA AAACATCAGG AAATGGAATA AGGCTCAAT  
GTAGATACAG CTGCCCTCAA GATTCAATT TCAGTTTG

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

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ATATGTACTA CATTGTGGTGG AATACGCATG TACAATTCCT CAAAAATAGT AAAGAGCAAA ACAAAACAAA AATAGTAGAA  
 GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT  
 TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTTCATAT  
 CCTAAGCATT TTATTTTAGC TCAAAATATA AAATATTCAT CAGTTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC  
 TTTGATAGGN GTTCTTGTT TTCTTGATTT CATGTTTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCAATTGTG GGCAACGGGG AGATTAAAGCT GCCAGTGGAG ATCAGTGGGG CCATOGAGGA  
 GGAGTTCCT GTGGCCCGAC TCTACATCAG CAAAATCAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG  
 AGAACCTCCA GGTGGAGTNT CACCGCAAGA TGGAAAGTAC CGGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG  
 CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCTTATGA  
 CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AAACTAGCTT TGGTGGGAAC TCCCTCACCC CTGCTCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA  
 TAACCCAAAC ACCCCACCAG CCCCCTCTC CCAACACCAC CACACTGGGG ATTAAATTTC AATGTGGGAT TTGGAGAGGA  
 CAAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAATTTAA ATTACAGTAT TTAAATTAGA  
 ATCATTTGTG GAGTTCTTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTATG GACACTGATC CCCAGTCTGG  
 AATTTTAAAA CAGCAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GCTCCGTCAG CACAAGCACT CCCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCTCTC  
 CCCGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCCAG GCTGGACATC TTTACCAGGG  
 GCTGGAGAA AGCAGGCGGT GCTCTGTGGT CTCAGAGTCT TCCTGCGCT CTTTGGAAAC TGACAGAACA TGACCTCAGT  
 CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAACA TGCCCTTCCT CGCAGAGACA CGAACAATCT  
 CGTCTCTACC AGAGGCCTGT GAGACATCAG CTCAGGA

SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTAT TAATGGCTAG AAAGTCAGGT TCACCCAAGG AAGTCACTGA GGGGCCACAG CATTTGAAGG TATGGGGTTT  
 GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAAC CAGGGGCGAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA  
 CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTCGG TCCGGAGGGA GGCAGTCACG GGCTAGGGCT  
 GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT  
 GGCACCT

SEQ ID NO:2249: (Length of Sequence = 404 Nucleotides)

ATTTTAAAT TAGGTITGTT TTATTTAAGT TTAATGTAA TTCCATGCTG TGTTTCAGTA AGAACAATAC AGATTCTGTA  
 TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTACA CATACTGAAC AAAAGAGGTT GAGCGAGCGA  
 AGGAGGGGAG GAGTGAGGGG AAGGAGGTAG GGGGAGGGG AAGGAGAAGA AACAAAAGNN TTGAACAGGC ATGCAGGCTT  
 TTCCATACCA CCTTCAAGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG CAGCCACGGG ATTGTTGAAC  
 TGTTACCCAG CACCATGCTT TTCAGCAACA TTTTCAGCGG AGTTTGGGAA CATTTTTTTA CCAGCAAAAA CCATTACACC  
 GAGT

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SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAACAT TTAAATCAG TCAAATTATT TTAAAAATTC CTTTGCTTAA  
TAGCCATTAC TTACTCACCT TTTGTTTTTG TTTTINCCIT CAACACTAG AGTACTGTAC TTTTGCTTTC ATTCCCTCIA  
TACATTCTGC CTTTCATCCT AAATTGTTCA ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT  
GTACAGAAGT TGGTGTATAT CGCTGATTCA CTTTT

SEQ ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGAATAAGGA GATGAGAGCA TGCTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCACTACA TCAGCTCAAG  
AACATAAACA AAAATGTAAT TTAAAAACA GATGGTTTTAA AAAATATCT GATAAAAT ACCTATCCCT CTTCCCTGCT  
GTGAATAAT TTAAATAATT TATCTAGAT GTAAAAATA TAATACAAA AAGTTTGTTC AAAGACACCT GTGTCTGT  
TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC  
TCTCTGGATG CAACCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCATTCTC TGAGGGCTAG  
GGCTTTGATT CTGAACATGG GGGGCT

SEQ ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAAGATAA ACAAATTAA TAGACCATTG GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG  
CAATGAAATG NGAGCTACTA CAACGTATAC CACAGAAATA CAAAAGATCA TTCAAGGCTA CTATGAACAC CTTACAGTGC  
ACAACTAGA AAACATAGAG GAGATGGATA AATTCCTGGA ATTTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA  
AAGGGTAAGA GTGGGGTGAG GGATAAAGA CTACACATG CATACAGTGT AACTTCTTG GTGATGGGT GGGC

SEQ ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATTTATTG TCATGTACAA AGCGGTGAGC CCACGGGACC ATATACGACA GTTGCACAGA GTCTAGAAA AACGCATCTN  
TCTAAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCTT CCCCCACCC ACAACGCACA CAGAAATGAAA CGGAGAAAAA  
GAGAGAAGCC AGTGGCCGGG CTGACCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG  
CCTTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGTCTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG  
GAACACTTCA GGGGG

SEQ ID NO:2254: (Length of Sequence = 380 Nucleotides)

GGAAGGCTCT GGAGAGGTC CTGCAGGATT ACTTTGATGG CAATCTGAAG AGTACCTGA AGTCTGAACC TATCCCAGAG  
AGCAATGATG GGCCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAAATA ATATACAATA ATCAGATCCA CTTTCCACCA  
CCTACACAAA AAACATTCA TACAGACTGC AGTACAGTGA TTTTTTTT TGAACATAAA GGTCAAAAT GTTTCATTTT  
CTCTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAAACCAA AAATAAATGT CTAGGGCCCC  
GAACCCATCT GAATGGGACC CCTCCTCTCA GCCAAGGGCA TTCCAAAATT AACCTGCAAA

SEQ ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTTCCTGTG ATTCINCAGA GCCCAGGAGT CAGTGTGGT GGTGGAGGG ACCTGCCCCC ACTGGTTTCAT  
TTAACCTCT GTCTCGGTGC CCTCAGAAC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG  
TGATCTATT ATCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTC TGTCCCGC CGGATCTGCA CTGCCAACTG  
GGATTGGGT CGAACAGCTT CATAACATC TTCAGCATTT TGTACCATCT GCTCCCAAT GGCCAAAATC ACATCACCAG  
GNOGCAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGAAG

SEQ ID NO:2256: (Length of Sequence = 371 Nucleotides)

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TTTTTTTTTT TAACTGTAAA TGCTATTTTA TTTTAAACAT TTTTGTTTAC AAAAAAAAAA AAAATCAATG ATTGGTACCT  
 TTTTACACT CTCAGATTCC TGAATATGGA CAGATCTTCA AAGGGAGGAA GGAGTTCTCA TATGAAATTT AAGATAGACT  
 GTCCCTGAAGG TTGTGGGGTG GGGTTTTTTG TTGTGTTTAA ATTGCTTTTT GTTTTTAAGN CACAATAAAG CTAAAATGTC  
 AAGTCTCTGG GAGAGATCCC CTAAAGTTT CAGTCAAGGA GCATATCAGA GCACAGACAA GGNGACCCCA GCTTGGTGCC  
 CGCCGGCCCG TCCCGGCTGC CCAGNGTAT TTGGTAGCGC ATGGGTGAG A

SEQ ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACTCTATGG CACTAATGTA TGATGGATTG ATTTCCAGAC TGTCGGCCAC GGAAGCACTT CTTCATGGCC TCTGCCCTGG  
 ACAGCAGCCT GTCTCCGGG CTCCCATGT TTTTACCAGC TTCTGCTGAG TTCTACAAT CTGAGCTCT GCTGAGAATT  
 CTTTTCTTG AAATCTTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC  
 AAGAACTTGT TGATAAATGG CTTAAAAGTT TTTACAAGAA GTAACCTCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA  
 TTTCCAGAT AAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTGCAGC CTCCGAGAA CCTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT  
 TTGTATTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGGCGGTCT CAAACTCTG ACCTCTGAT CCACCGCCT  
 TGGCCCCCA AAGTGTCTGG ATTACAGGG TGAGACACCA CGCTCGCCT TTATATATAT TTINAGAGAG GGGTCTCAT  
 TTTNTGCCC AGGCTGGTCT TGAATCCTG GGCTCAAGCA ATCTTCCGC CTCAGCTCT CAAAGTGCTG GGGATTACAG  
 GCAATGAGCC NACCGTGNCC

SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCAGAT CCCACTGTTA GGAGAAGCC TCTGCTAACA TTTTCTCTAT CTGTATATCC TCTGGGAATG AGACCCACTA  
 AAGGGCTAGA GTGTGCTCA GTGTGAATC CTCCTCTCG ACTCCATCTT CGCGTAGCT GGGACCGCG TTCAGTGGC  
 AATATGCAGC TCTTTGTCCG CGCCAGGAG CTACACACCT TCGAGGTGAC CGCCAGGAA ACGGTGCGCC AGATCAAGGC  
 TCATGTAGCC TCATGGAGG GCATTGCCCC GGAAGATCAA GTCTGTCTCC TGGCAGGCGC GTCCTGGGA GGATGAGGCC  
 ACTCTNGGCC AGTNGGGGT GGAGGCCCTT ACTACCTGG AAGTAGCAAG GCCCATGCT TINGAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTTG AGATCTGAGA TTCTTTAAT CAGAAGCACG TGCGTCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCAGCG  
 CTCTAGGACT GCTCCTTAG AGCGAGGCTC GGGCTCTTGG TAAAAAGCA TTGCTTGAT TTTATTTAAA CAATGTGAA  
 TCTTCAAGT GCCAGTCTAC ATGCCAACA GTCTCCAGG NITCAAGNC ACAGTCACCG TCACTCAGAG ACTGCTCAT  
 TTNGCAAGAG AGAAAAACAG TGACCACCAC AGAGGCGAGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCGCTA  
 GAAACTGGG GCCACACACA AGNGCCANC AGGTGCGCC

SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT GAGACAGAGT CTCGCTCTGT CGCCAGGTTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCGCC  
 TCCCGGTCC AAGCAATTCC TCTGCCTCAG CTTCTGAGT TGCTGGGACC ACAGGCGCAC GCACCAGCC AGGCTAATTT  
 TTGTATTTT AGTAGAGACG GGGTGTACC ATATTGGCCA GGCTGTCTC TCGAAATCT TAAATCCAAA CATTTCTATT  
 CTCTAGATC CTTGCTCAG GCGAATCGTT TCATCTTCC CTTATAGCTC ATCAGCATGT AAGTGTCTTG ACATCTCTCT  
 TCTCTTCCC TATTAGCTCT CTACTCTCTN CANTTACAG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

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CTGTCAAAAA TGTATTATAT CAATAATTTT ATCAGCAGCA TTTAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA  
 TGGTAATGCA GTCAGGCCAG CACACAATAC ACCGTTTTCA TCACACACTG TAACCTGAAT CCCTGGCAAT TTCCTAGAGG  
 TATTAACATC ATACCTTATT AAGAATTATT GGGCCNAGG AGTNGGGGGG TGGGGGGGT GCAATCTGTC CAATCAACAT  
 CTGGCTCTTA CTCTCTCCN GTAGTATTAC ATTTGTATAA TATCTTTATA GGAAACAAC CAACTCCATG TTTATAAAG  
 CACCATACGG TTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAAGT TGACATGGTC AATGAAGAAA TAGGCAAACA GCAAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA  
 AGCAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT AACAACCTCC ANTAACTTG CCAGCTCAG  
 TGTTCGAGCC ATGCCCCCTC CAGAAGAAGT CACCCAGNIT CTGGAAGAAA ATAGTGANIT GATTCGTTCT ATGGAGCAGT  
 TGACATCCTC TTGGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCNNGGA AAATTINGGA ATTCAAAGGA  
 AAACITTNAG CAACANCTAA CAGGGNGTG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTCCAGCC CACAGCCAG GATGGCTTG AATGTGGCC AACACAAAT CATAAATTT  
 CCTAAACAT TATGAGATCT TTTGTGATT TGTGTTTAG TTCATCAGCT ATCATTAGTG TTAGTGATT TTGTGTGTTG  
 CCCAAGATAA TTCTTCAAT GTGGCCAGG GAAGCAAAA GATTGGACAC CCCTGGTCTA GAAGGAAGG CAAATATTAA  
 ATAACCTCAG AAAGTGATAT TACAAATTGT GGTGAGTAT AAACACACTA TCAGGTGTA TAAAGGAAGT GAAGGAAGTG  
 GTGAGGAAT TCTTATCAGG GNAGTGATAT TINANTGAAG GGCCTTAGGG GATGAGTAGG G

SEQ ID NO:2265: (Length of Sequence = 301 Nucleotides)

CACCTTCTCT CCACTCTGCC TTTCCACAGC AGTCAGTCTG GTCCAAGCCA CCATCATCTG TCACCCAGAC TACCATAGCC  
 ATCTCTAAC TGGTCTCCC ACTTGCGTC TTTATCTGC ACACAGCAGC CTGAGTTCAT ACACACAGT GCATTCTTC  
 ATATTTTGT TAAACTGTT CAATGGCTTC CCATGGAAT TGGGAGTCTG GATATCTCA CAAGTGTGTA GCATGGCCA  
 GGACCAATCT GGACACCCCT NCCGTGTTGT NCATNCATGC CTTGCACCAC TTTTGGCCT T

SEQ ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCCTGCATG CCCACAACA ACACAACCTT ATTCTCTCC CAAACATCTG TCAGGCCTGG CCTTCTGAG CAGGAGCTGA  
 GCAGGAACAG GGCTGGCTG CCTCTCTCT GCCACAGCTC TGACCTGGG AAGGCTGGA GCTGGCATG TAATGGATGG  
 GGGAGTGGGT GGAGGATCTG AGGGTCCCCT GGTAGGTTT CGATACCTG GACAGGTTGG CCTCATCTG ACTTAGAAT  
 CGGGAGGGG CCACCTTCT TCCCTCTCT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCTCGA CATGTGTTCC  
 AGAAACCCA GCCATGAGG ACCGCTNTGA GGAAGGTTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CGCTCTGTC CCCAGGCTGG AGTGCAGTGG CAAAATCTCG GCTCCGACC CCCCAGAC ACATATGACC  
 CACCACCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGG CTTCTACCT GCGGAGATCA CACTGACCTG  
 GCAGCGGGAT GGGGAGGACC AGACCCAGGA CACGAGCTC GTGGAGACCA GGCTGCAGG GGATGGAACC TTCCAGAAGT  
 GGGCGGCTGT GTGGTGCTT TCTGGAGAG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC  
 ACCCTGAGAA TGGGAGCTTG TCTTCCAGC CCACCATTC CCATCGTGG CATNATGCT GGNCTGGTT T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

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CTTCTCTCTC CIGTTCACAC AGTATTCGAT TATTTCAATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTGTGTTT  
CAATGGTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGCA GGTTTTTGA AAAAATGAAT TTAGACAAAT  
ATTTAGTAAC TGTATGATAT ATAACCCCC N

SEQ ID NO:2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TTTTAAACAA CACTCAACTT TGTGAACCCC TGAAGATTTT TTGACCGTTC CAAGTCTTAA TGCCACACCA  
CTATTCCAGC GAATTTATGC TACAACTGGT AACAAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC  
NTACCAGCTC TGGNCTATAT TGCTCCCATG CATTTAATAT ATTATNNGT TTTATANCCA CTCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGTAAAG GAATTCCTT TATTTTITAC AAATTAAGAC TATGCAGATT TCATATATTT CTGAATCAAA AACACCTTTG  
TCTTCACAGT ATGAGTTAGA ATGCAGCCTG AGCTGAAAAT CAAGAACTA GAAAAGAAAG TGGTAGAGAT AACTATATTA  
AAAANCIGTT AGGTATTTCC TTTAAAAGTA GGTGTTTTTT TTTTTTINCC NCTTTTTTT TTT

SEQ ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCTAGCA TCACCAGCAT  
CCTGAGCTTT GTCTGTGTT GGGAGTCCCA CAAGGGCTGG TGCAAGGNTT AGCAGCTGCT ACTTGAACCC TAATCCCTGG  
GTGGATGTGG TCTCTGTAA CTTAAGAGCA AATGTTGTIN ATGACATGCA CGGGTGGGCA GAGGTTGAAA AGAACAGGGG  
TCTACGGAGG AGCCAGGCCA GCCAGGTGAG ACCCTTCTTT CTAAGTTGGC TTCTTGCCA TTCTGGGGA TINGGGGAAA  
GAACGACAGA ACTTACCTTC CATCTTCCT CTCACAAGCA GTG

SEQ ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCAGCG CTTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC  
ATGGTGAAAC CCCGTCTCTA ATAAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGT TAATAAAATC ATGTATAAGC AAAAGACCTA TGAAAGTATA AAACAGACCA ATGGATTTTA GTATAAAAGT  
ACAAAACGTT CATTGAGGTG GGTTCAGTTT TCCCACAAA ACTAACCTTT AAGAACTAC CACTTATCAA GTTTTGGTAT  
AAGGTATAAT ATGAAAGANG AAAATCCATA ATTATTTGAA AAACACGNTT TAAATACITT CTTTTTTTCC TACTACATAT  
CTCTATTAGG CTGGGTTTTT TTCACAATA ATTGAATACA AAAACAAATA TGAGNATTTA GCTGTAATCT AITTAATCCCG  
ACATTACAGG

SEQ ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TTGCAGTGGT ATATGCCTAT TGTCCCAGCT AATCAGGAGG CTGAGATGGG AGGATAGCTT GAGCCCAAGA  
GTTTGCGACT GGGCCTGGGC AACATAGCAA GACCTATCT CTAAATCAAT CAATCAATCA AACAGTGGTA TGCCACCCAG  
AATAAGTATC TTTTTGAAG TAAAAACAA AAAGCGAAAT GGGACAACA GGTCTGGTAG TGGTGGCTGT CTGTCACTGA  
CAATGAGGTC TCTGCAGAGC CGTTCCCTAC CTTNCCCAAC CCCCTAGACA TCAGGTCCCT TTCCTAGGAA AATGAGAGCA  
CAGACCTAGG NCCATGGNCT CCCAACTTT TTCTTCTCTT CACTACAGAT TC

SEQ ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATTCTTT TCCTGAGGAT GTTGGTTTTA TATGGATTGT CTTTAAGCAT CACTTGGAAG CGCTACAAAT AATGCAGCTA  
AATGTTTAAAG CAATTAGGAA ATAGGAATTT TTAAATACAG AATTTTGCAC TGCAGAGTGT TTACAAGTAT TAAAAGATTG

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TATTACACAA CIGTGTGTAA ATTCTAGTAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACTTGGN  
 TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCTTT GTTGGAAATAT TTTCATTTG AATAGTTACA GGAAAATTTA  
 TTTGCATATT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

SEQ ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGTC CTGGAGGCAA CCGCAGAAAC AGAACANIGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCCGCCAGCT  
 GCAAACACCC CTGACATGCA GCGTCTGT TAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCTGGC  
 GGGTAAGGAC TCCAGSCACA CAGCAACAAG TGGCTGCCAC CTCAAATCCC ACGTGAATA TGATGGGGTC CGAGCCAGCC  
 AGTAACTCCA NGAGGGCTGT AGTGTGTAAG TTCGGCCAGA GTTINCAGAT ATAATANCAT TGGCCCCACG ACGTAGACCT  
 GTGGCGGCTC AGGGTAAGA GACGGGAGC

SEQ ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTTTATATAG ACTCTGGTTC TAGAACTCG CCTGCAGCCG CTGGCTGGAC CAGCACACGC TGACGGGGCC GGACTATTTA  
 CAGGCCCAT TGGGGCTGTA CCTTGGCCAC CTNCGGCAC GGTGCTCAGC TGTGACGCA AAATAAGTTA GGGCCGGCCG  
 GCGGGGGCG GCGGGGACG GG

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTTT CCCCAAATGA AGCAAAGCAA GTACTGGGGC GGAGTCATCA GAAATACCTT GGGAGGTGGT GGGGAGGGGA  
 GTCGGGAGCA TCAGGGAAAA CCCATCTCAA CTCACGCTC TCAGGGGTG CACTTGGAAA NCTTTCGTT TTCCATCACT  
 GGTGCAGAAA GAACTTCCCC AGGAATGGCC AGTGGCCTTT CGCCCGTAAC AAGGCGCAC GCTCAGAGCA GTCTTCTCC  
 TGGGCTGGGT GGACCGGAG GCGCGAAGGA AAGCCT

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TGCACCCATG GCCCCTCCA GAGCCCCAGG GCCCCTGAGC AAGCAGGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG  
 AAGGCTATGG CTTTGGG GGAGATGATC CCTACTCAAG TGCAGAGCCC CATGTGTCAG GTGTGAAACG GTCCCGCTCA  
 GGTGAGGGCG AGGTGA CCTTATGCGC AAG

SEQ ID NO:2280: (Length of Sequence = 401 Nucleotides)

GTGATTTTCC TGTCTCGTC TCCTGAGTAG CTGGGATTAC AGGTGCCAAC CACCAGCCC AGCTAATTTT TGTAGTTTAA  
 GTGGAGACCG TTTCGCCATG TTGGCCAGGC TGGTCTCGAA CTCTGACCT CAGGTGATCC ATTCCCCCTG GTCTCCCAA  
 GTCTGGAAT TACAGGCATG ACCCATTTGG CCGGCCCCA CTGTTTCCT TCTAATCGAG TGAGAAAATG GTCAGTATTT  
 CTGTCAACAA AATTCATGAG GCTCTTTGTA CGCACAGGAC TTCAGGCCTT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT  
 CCACAATGGA GGNAACT GGGGGTTTTG AAAAAACAGG GAATGTTTCC AGAATNTTC TTCAAGAGTA TTACATTTT  
 T

SEQ ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCAGGGGA TTGTCCAAGG GTCTCCGGC GCCCAGGCA GTGGTGGTGG CAGCAGAGT GCCACTATG CAGTCAACAG  
 CCAGTTCACTN ATGGGGGGC CCGCATCTC CATGGCGTCG CCCATGTCCA TCCCGACCA CACCATGCAC TACGGGAGCT  
 AGGGGCCCGN CCGCGNAAC TNACAGCACC AGGAAACCA ATENATGTCC CTGCCCC

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

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CCGATGGTGA AGTGGTAAGA GGTCCGATGGC CTGGGAGTTC ACTTTATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC  
 TCCCAGNTTT AACTGTGAAA GTATAAGAT GGAACAGAGC TTGANITGAA AGAGAATGAT ATTAAGNCTT TAACTTCCTT  
 TAGGCAAAGG AAAGGTGGCT CAACITCCAG TTCCCTTCC AGACGCCGAG GGAGTCGATC AAGGTCACGC TCCCGATCCC  
 CCGGTCCGACC ACCTAAAGT GCCCGCCGAT CTGCTTCTGC TTTCCACCA GGGCGACATT AA

SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTIGACAA  
 GACCTCACAG TCCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC  
 AGTCCCGACT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCTCAAC ACCAAGCTGT GGGCCAGAT GCAGATCGAC  
 AAGGCCAGCG AGAAGGAGCA TTCGCATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCCIG ATCT

SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GGCGTGACAC ACGGCCCGG CCTGTGGAG CATTTTAAAA TCTGATTCCT TTCCCCCTGA AGTTTCCGTT CAACCCCTNN  
 CTGTGGTCAG GTTGATTNCT TTAATTGCTA AAACAAGTCA AAATTCAATA TCCATGGCAG CTGACAATTC AGACTTTGGC  
 ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTGTGTGINT TCACPTATTT ATAGTGCTAT GAAGCTGGTC  
 ACCTGGGAGA ATGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCTGCTCT GCTGCCAGG CTGGAGGGCA GTGTCTCGAT CTTGACTCAC TGCAGCTGAT GCCCCCTGGG  
 TTCAAGCGNT TTTCCACCT CAGCCTCCAA GCAGCTGGGA TTACAAACAT GNACCACCAC GGCTGGGTAA TTTTGTGTC  
 TTTAGTAGAG ACGGGNTTT GCCANGTTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCACTGGCGC AATCTGGCT CGCTGCAAGA TCTGCCTCCC AGGTTACACAC CATTCTCCCG CCTCAGCCTC  
 CCAAGTGGCT GGGACCACAG GCACCCACCA CGCTGGCTA ATTTTPTTTTG TATTTTPTAGT AGAGACGGGG TTTCCCATG  
 TTAGCCAGGA TGGTCTCAAT CTCTGACCT TGIGATCCGC CCGCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN  
 CACTTGCGCC CGGCCTTCAC CTGTAGTTT TTCAAGAGGT GTTCGTGATG TCCACTGTGA TAGTTATTTT GTGTGTCAAA  
 CTGACTGGGC CACGGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

TTTTTATTGT AATGAAATTT TAAAAGGCAG TTACATTAGT TACACATATA CACAACCGAC TTAATAACTG TTAGTCATAG  
 AGAACATTCA AGAAATACAA ATGATTTATC CACAGCACAG TTCACATCCA TAAGAAGAAA GAGAAATGGT TAAGTACTTA  
 AACTGTCCAC TGACACCTGC TTATGAAATC TTTTCCTTTC TTTCTTTTTT TAAAGGAAAC TGAGATTGTT AGATGAAGCA  
 AGCCGTCCTG CTCCCGCACA GCCTGTGAAA CCTCCATTTT GCCACTTTCA AGGTCAGTGC CCCACAGACC CTGGGCTGTT  
 GTTGACCATA AACTAGCTT TGG

SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGCGCGCAA AGCTCAGCTC CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACACGNTC  
 CTCTAGGCCC TTCAGCGGCA NAGCGNCTCC AGCACCTGT TGTGCTCCAT GTCCGTNAAC TGCTGCACGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)



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CCGACTCTAC TGAAAATACA AAATTAGCCG GCGGTGGTGA CGCATGCCTG TAATCCCAGC TACTCGGGAG GCTGAGGCAG  
 GAGAATTGCT TGAACCCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAACT  
 CTGTCTCAA AAAAATAAAA AAAAGNITAA ATGAGGTCAT GAGGGTGAGA CCTTGATCCA AGCTCATAAG TGTCCTTAGA  
 NGTGTCTTA GAAGTGTCT TAGGACACTT CTTTCTAAGT NTCCTAAGT GGGGAGCTTG CTCTCCCAA

SEQ ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTCATTCTA TCTATTGCCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC  
 AGGNTCAAGT GATGGAATTC CCNCAGTTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCAGTGATT  
 GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC  
 CRAAGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTGTCTT ATATTCTCCA CCTTCCCTTG GTTTCATTTC TCTTCGCTTC CTGAATGAGA AGTGCTGAG ATACCTTCAT  
 TTCTCTGAA AGTATTGATC CAAGTTTAGA CAAATATCTC CCCTCTGTG GAGAGAATTC CTTATATGTG AAAATACCAA  
 GACATTCTTG ATATTTAGCA GGCATCAA TATTGTCTC CTCCTTTTGA GCATAATTAA GCCAGACTGA TGTTTGCAAT  
 TGAGTATCAT CAGCATGAGT AACCNITTTA ATCTCTCTC CCTTAACCTAC TGTGTCTACA CTAGAGTCTA GGGTCAGGGT  
 ACGTACAGTG AT

SEQ ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCTGACT TAATGAGTIN TCAGGCTTCA ATGCTGTINT TAGAGCTACT CCTTCACACA AAATAGTTCA GAACATAGAG  
 AAGGACCAAG GTTAATAAAT GATTTINATC CCAAACTA AACATGATTG ATGGGTAGAG GCTGCCOGAA GTACTGTGTA  
 AAGATGGAAT CTGAGATAGA AGRATGCTGT GGTCAATTAG TAATCTCTGC CCAATGGAGG ATTAGTGACA CATGCCCTGT  
 ATATTTGTCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATCATATC AACTTACTAA TAATCAAGCA CTTTCATAT AAGACAATGT ATGATGTTTA  
 GTAAAATTGA TTTTNCATA AAAGAAGTTT AAAATAAAT AGCTATTTCA AGAGNATCAT GGTGTGCAGC AAATAGAAAT  
 GTGTGCTTA ACTCAAATCA CAGTAATAT CTTGGTGTAG CAATGATTT CTTTGAGCCN TTATCTTTTC ATCTGT

SEQ ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCTGTA TATTACCCAT TTAACTCAT GTGTAACTT CAGTGATGTG  
 AGCTGTATTA AACCAGGTA TTAGTGAAA TTTGCATTGT AAAACCTGGT AACAGTAGAC ATCTATGGGT GGTCAATTAAT  
 TCAAGGACAC CTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAGATA CANGGATTAA  
 TACATATTTA CATTTTITGA AATAGTTACT CTGAGGTGA CAGCTGTAC TTTCTAAAT ATTTACAG

SEQ ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCTCTG GAGGCTTTC CCCTCCCGAG GGCTTCCTC AGGGCTACGG TGCCCCGCA CAGTTCAGTT TTGGCTACGG  
 GCCTCCACCT CCACCGCCAG ATCAGTTTGC CCCTCCGGG GTTCTCTCT CCACAGCCA CTCCCGGGC AGCACCTCTG  
 GCTTTCAC CGCTCCGTC TCAGGCTGCC CCGACATGA GCAAGCCCC GANAGCTCAG CCAGANTTCC CCTATGGTCA  
 GTATGCAGGT TACGGGCAGG ACTTGAGTGG CTTCGGACA

SEQ ID NO:2297: (Length of Sequence = 306 Nucleotides)

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CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA  
 ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGGN GCATGTACAA TTNAAGCAA CAATTGAATA  
 TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAACTA GCACTGTGCT CTTGGCTGAA AGAGAACGGG  
 ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTACAC ACATTGGGAGA GAACCC

SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGTACACCTA GTATCTTAC AGTACTATT AAGTATTTT GAACTCAAAG TATATATTCA TCTTAACTC CTGGAACAT  
 GAACCTCCC ATGTAATTN CTGATGAATG AAAAGGAAAA CTTCTTTCA AATAAGTGC ATCTGTGCA AAAGTATGTG  
 ATTTAAAAAC ACATGTAAAT ATAATCTTAG CTCTAATGTT TTCCTTTGGG AGTTTGGGAA AAAGCAGTTA CATTCTCTG  
 TTGTCGTGTT TTTATCATTT GAAAATTGGA AGGATTCATT CTGGATTGCT GAGCTGCATC AGTAGGG

SEQ ID NO:2299: (Length of Sequence = 289)

GTTTTAATG CATTTTTTTT AAAGATTAA GTAAATGTC TCAATTGTAA AAAATACACA CCGGGCAAAT CCTTACCTGG  
 NTAATAAATA TCTACATCAC AGTACAATAA AATTNCINCT CTATAAAATT TAAATATGGA TTATAGTCTA TCACTATCAA  
 AAGAAACACT ATGCTAATAT TTCCATATTA TTAATAAATC AGGAAAAATT ACGNGCTTAT TTTAGAACCT GATGCCATAG  
 CCGTTGGAAA GGGCAAAGAG ATTCAAATGT CGATCATCAC TCTCCATTT

SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG  
 CCTCTTAGAT ACCAGCAGCG TCTCAGAACC CAACGTGTCC TTGTCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG  
 CTGTNATCGN GGAGGTCCGG ATGGAAAACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA  
 GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA  
 GAGTTTATTC ACGGTTGAGA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEQ ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTTGGTGT GGGATTGTT GTGAGGTTG CTGACACCTT GACCATTTT CACTGGCTGG AAATGAAAGG AACTTCCAC  
 TTGCTCTTTG AAGGCAATTC CATTCTCTCC AGGGTCTTA TTTCCTCCC ATATTCTCTC AACTTCCAA ACTTCTGAAG  
 AAGGGAGCAA ACTTTGGCCA CGAGGAAGGA GTGAGCTGC CTCTGTACTT GTCACTGCAC CTGCACTGGT TGAATCCACC  
 TTTCCTGGT CAGCGCTG TGCTGGGTG TCACAGCTTA GGACCC

SEQ ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAACTT GTGGGGAAAC TCGGAGAGAA GATCATCGTT GGCGCGGTCC TTGGTGGGCC CAAGGATGAT  
 GATGGGGCGA GCATAGTCA CTCCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTGACCC TCGATCCAG  
 AGCTGGAGCC CCAGTCTCTG GCCTTTAACC TTGACCACTC TCGTCTCTCA ACCCGCGTT TGCTGGGGAT GAACCCAATG  
 TCGTGGGTCT CACTGTGAGA GTGGACCCG CGTGNCTGCC ACCACTCTC ATCACTAGCA TCGATGACAT GCAGCATN  
 CCCAAGCGG AAGTTCAAG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGGCT CCAGATCATC CTCTCCAAG GGCCCGCAG GCGCTCCTT GGCTCTGGC TCCTGCTTGC CGCTGGCCTC  
 CAAGATGGTC ATGATGGAGT TAGGGATGTN AGCTTGCTGG TGGGGGTGA AGGAGCGGAC ATGGGCCAGC AGGGGCTCCC  
 GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG  
 TCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTGGG GTACTTCCAC AACTGCTTCA TGATGAGGCG GGACAGGATG

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TTCATGACGG AAGCCCCCA GGGGGGGTA CATGGTCANG GACCTGGATG ACGGTCCTCA TGAGCAACAT GGGCAAGGGG  
GCT

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTTGCCAGG CTGGTCTGA ACTCCTATTC TCAAGAGAGC CTCTGCCTC AGCCTTGTA AGCACTGGGA  
TTATAGGCAT GAACCACGC ACCCAGCCAA GATTGCCAAT TTGTATGATG AGACTGGAAG GACCCCAATG TTTCAGGATT  
TTGCTACAAT ATACAAAAA CAATCTGTA GACAGTGGCT GGGCTTTTTT CTGCTGAT TAGTTCAGTG CACATACAAC  
TTGGACCAGA GGATCTGGGT TTGAATCCA TCTCTGATAC TTCCAAACT GAGCTGTTTT CCTTATTGT AAAGACTAAG  
ATCGCGTATG TCAAAGAGCT CTGTAACTC TCAACACATA CAAAGTACTA CTGCTG

SEQ ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGCC TGCTCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCCTC  
TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCCACG TAGAAAGGCC CCGGGGCTTT ATTTTAGTCT CCTTTTCAGG  
GATGTGCTGG GCGGGGGAGG GGGTTCCTGG TGCTACAGCC CTCTCCCCAC CCTTAAAGGG ACGCGACGC TGTITGCTGC  
CTTCACCACA TATTAGTCT TGACCCGGC AGGGGACCC ATGGAAAAGA TGGGGAAGAG CAAATACAT GGAGACGAGC  
CACCTTCAG GGATGCTGC TTGGGATTCC CAG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCCT AAGTAATTC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA  
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTGCC TATTGAGCAT TGTTGATGAT GTGTTTTTAC  
ATTTCCAGGT GAAGTCTGA CCTTACCTGT TTGGCCAAAG ACGTAAATG AGAGGAAAGG CCTTGGTCTT CTGATCAAC  
CAGCATTTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTG  
GATGCTTTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACGAATGT AAAATACGC AAGTCAAAC CTGGTAGAAC TGATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA  
AATCAACGC CCTCTATCG AAAATGGACA GATCCAGCAG GCAGAAAT AGTAAGGACA TGTGTAGCT CTGCAATACC  
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACAACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA  
ACATTACAA AGATAGACCA CACGCAGGCC CATAAAGCAC ACCTTAACAA ATTTAAAATA ATATAAATCA TACAGTGTG  
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CINTTTTCTG AGAAGCATGC TTAGGTGTG GGACAGGAAG TGGTAAAGGC AATGCATCGT CCACAGAGGT  
GGATGAAGCA GTNACAAAG AATGATAAT TNANTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT  
TACTCTCCAT CATCTGGTG GGGGSCAGIN GTGCAGGAAA GCCACAGGGA TTGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCTATGA AAATACAAA AACATTAGCA CATTCATAGT ATGTATGTGT CTACAGGCAT TINCCAGCC CTATGAGAGT  
NCTGCAATTT GAGAAGTACT AAAATGTATT GTTTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGTG  
TGCAAAGCA GTCTATTTCC ACTGCAATTT CTGCTACTAT TAGCTTAAA ATTGCTGAGA CAAAGGACAA CCTTCTGATT  
ATNCTGCTGA GATCTAATGC AAAGTCCTCT CAGANGCTTC ACTACACAT

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SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTGNGGGCTG CCTCTCGTTG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG  
 CTTCTGTTGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA  
 TGTCACTCTT GGTGCTTGAA GGCTTTTCTC CAGGGAGACA AAAAGTTTGT NTGGCTAAA GCTCCCTGGT TGCTCAGGAG  
 CCAAGGGTCA CATAATGTGC CAATGGGGGT TTTTGCCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNNACATCC  
 CTTTTCTCTC TCTTCTCTG CCCACCTTCC ATGCCAAGG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGGCC GGCCTGGGCA ACATAGACAC CATCTCTTTA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA  
 AAGACTAATT AGAAGTGAAA AATACCACTG AATGTTGGT GTACAAATGG CAGCATAATT TGATTTACAC TAGATTTTAC  
 ACATTTGTTT CTATTTCAAA TAGGTACTTT TACATTTTCC TTAACATCAT CTGACACAGA GTGAATCACA GATATATGTT  
 GGTGTCGAAA GCAGAGGTTA CTATTATTAA NCGAAAATTT TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTACAGAT  
 TGTC

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAGTTTATA AAGCTTTTAT AAACATTTCA AACAGCTGTG CAACGAACAC ACCAAATAAA AGCTCTAGAA TAGCAGTCCA  
 GACGTTTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTCTGTG NCTCTGCCTG GCCATCTCT  
 CTTTCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG  
 AGAAAGTCTC GTTGGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CTTGGGGTAT  
 TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEQ ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTTT AAATTAAGAC TGCCTTAGTG AGAAAATTTC AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA  
 GAAGTAATGA CATAGGCAAA TTGTCAAAGG AGAGGTTCCC TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNTCTGAAC  
 CCAGCACACA GTTCACTTAT GGTGGTTTGG AAATCTGCCC TGAATTTTNC ATGCATCTTT TAAATTTTGT GTTTATTTTT  
 NCAAGAAATA AATGAAGTCT TTATTTTTTNC AATGAGGSCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGGTT  
 GGTTTCTAAT CTGGTTTCAT CTCCCCACT GATCTTGAGT TTTAAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC  
 ACTGTCAAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAAC ACAAGGGCT CCTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCTT ATGGCCTCCT  
 TCATGACGCT CACGAGCTGC ACCTTCTGTG GCTCCTTAAG CAGTGACTGC TCACAGCGAG TGCATTCTTG GNTCCCAAC  
 TCCATGAGGG CATAGCAGGC GGTCAACACA TCTCTTTCA CCTCCGTGCC CGTNTCCTCC AGTGCCAGCC GCACITCCAC  
 GNACGNCAGA TTCACCAGCA GGGCCAGGAA CTGTCTCCCG GAGCTGCCCG CCGGGATCCA GTCCGAGCCG CAGGTG

SEQ ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTTTATGT GTAGACAGGC TGTGGGTTCC CTCACITAA ATTGAAGCTC TGTGAACTT GAGACACITTA AGANTCTTGC  
 AAGTNTGAAA AGTGGAGTGA AACAAAACCA TTCTAAAC GAAATGTGT AACTNCTTC AGTTTTACAC AGTGNAGAAA  
 TAAGTATTAA ACAAGTTAGT CTCAAACGGT TATATCTTAA GGTACATTTA TTCTGTAT CATTAAGTAG ACATATCTTG  
 GTTTAGAGAG CAGCACACAA GACATTGTGT ACTNTTTAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)

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AATCATAGCT TACTGTGGCC TCGATGTCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG  
 GTGGGTGCCA CCACACCTG CTAATTNAT GTTTGAAGA GACGGGTCT CACTTGTG CCCAGGCTGG TGTGAGACTC  
 CTGGGCTCAA GCTAAATCAC CCACCTGGC TTCCCAAAGT GTGGGATTA CAGGTGTGAG CCACTGGGCC CAGCTCTGAT  
 TTTTGTATTT CTTACTTAAG GCGACATACT TAGTAGCTGT GCGTCTGGG GCAGATACCT CCCAAAGCCC CAGTCTCTGTC  
 ATCTATAAAT AATGTAACAA CAGGGCCCCG CTCGCAGGT TGCTGTGTG ACATATGTGT GTGTACGTAC CCATGTGCTT  
 NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTACTA TTATTAACAT TACAGTACCA AGCATCCCA AGAGACAGTC ATTGTNATT TTINATCAAG AAATAGGGCT  
 GTTTTATACT GTTATGACA TCAACTTTT CCCAGTGCAT TTTTCAAAA TATTAATAAG TTCATTCCIT TGTGCTTTTA  
 ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TTTATTTTAC ACTTACAAA GAAATGCCC ACCCCTTTC CCCATTCCCC CAAAACAGTC TCTTTTACA AACATTTAA  
 AATTAAAACC AAATGAAGAT AGACAAGTTA ATTTCACTAC AATTATTTIN CAGTGTAGCT GTCATAATTA GAGTTTAAAT  
 TTCTTACAAG TGACCAATGT CCAAGTACT TATAGGGAAA TCTGATTAT CGGCCAAAGG AAATTCATA TTACAAGTTA  
 GCAATTCCT AGTACAAAA TAGTCCGTGT GTTGGAACT CTTTTCCTTG TTACATAGGT CTTAGGTGAG TCTGCTGNA  
 ATACCTTAAC GNTTCCGGAT TCINNCTCA CAAATG AATCGTCACT GCTG

SEQ ID NO:2319: (Length of Sequence = 380 Nucleotides)

CATCTTAGT CATGGTAATC TCCTTGGCAG CACTTATGT CTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGTT  
 AATTAAAGAG ATCTGCATG CAAAACIGGT CACTAAATG CTCGCCAAT TTGAGGCTTT TTCTCTGCA ACACAAATTA  
 ATTTTTTAAG TAGCAGCATT TTCAGGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC  
 AAATATCAA CTTTAAACAT ACCTTGCCT TTNATAGTAG TTCTTCACAC AAATGCCTT AATCAAAATG CGTGTCTCTT  
 GCTGTGAT TTTATGTTTT GGCTCTTAG CAACCTAAT GTATGGTAG ACAGATTCCT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGT GAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG  
 TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG  
 AGTCTGACGT TGATGTCCAG CTCACAACA GACACATGAT GATCCNAGGA GAAACATGT CCAAAATCCT AAAAGCAGCA  
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTNATA GGGGGTACT ATGAAGTAC TTCTCCAC ATTAGTGCA  
 ACACAAAGTA NGAAGSTGGT GCCACACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTTCCT GCATCTGCCA CGTAGTTTC TAGCAGGAGT AGTGGGGGA GTAATACAGA TTCTNCCCTA  
 GAAGGGGACA CTGGTAACAT GTCCACTCT TGGATTAGCA GGGGTGGGT CAGGAAGATG ATATTNONT CTTTGGCCA  
 CCCCCCTGCG ATTCACTGG ACCCAACTAG GCCATCATGA GTGGCTTCT CCGTCTATCC CCAGGGGTCA TAGGATATCT  
 ACACCGCCTT TNAGACCCA CCTGCACTC CCATCCTTC CTCCTCCCC GGTTCAATGCC CTGCACTACA TAGCACAGCC  
 GGGATGCTTN

SEQ ID NO:2322: (Length of Sequence = 352 Nucleotides)

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TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG  
 TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCTTATGTG TGTGGCGAGA ATCTTGAAAA TCAACTCTGA  
 GCACATTTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTGA ATCAGATTGC CTACCTTGGT TAAAGTGCAG  
 ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAAATAAAT GTATATAGTT ATTTTGTCTA  
 ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEQ ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CTCTCTCTGT CGCCCGGGCT GGAGTGCAGT GGCACAATC AGCTCACTGC AACCTCCGCC TCCCAGATGT  
 CCAAGTGATC AAGGGGTTTC ATTTGCTCTT GGGGGATTAG GTATCATTTC GGGAGGAAGC ATGTGTTCTG TGAGGTGTGT  
 CGCTATGTC CAAGTGTCTT TTAATAATAG TGGAGACGGG GTTTCACCAT GTTGGCCAGG CAGGACCTCA GGTGATCTGC  
 CCACCTCAGC CTCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGGCTTCATT TATTTCTTA TCCATG

SEQ ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGACAGGA GGTGACCTCG CGAGCAGACG CGCGNCCAN ACAAGCAAGC CCGCCCCGGC CTCTCGGGAG CCGTGGGGCA  
 GAGGCTCGG ANCCAGGAG GGCGGAGCC CTCAATGAT CANINACCTG CTCTCCCCC TTTAGGTCTA TCAGCCACAG  
 TTTCTGCAAG TTCCAAGAG CAGCAGAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC  
 ACCCAGNGG AGTGGCAGCA ACTGGACCCT GATGAGAAGA TAGCATACGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAAA TAATAATGAT AATATTTNCT TATGCTTACT TTACTGTAAG ATTACAGTAT ACATTACAAC ATATGCGTTT  
 ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAATTAAGT TTTTGAGGAG TCAAAAGTTA  
 TGTTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTTGTTT AGGGGTCAAC TGTGTATTCT TTCTGTGGNA  
 ACATTTTATG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTTAGTTG AACTCGNGTG TTC

SEQ ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTGGTCTCG TGTGGCACAT GACACAATCT CTCCGTCCC TGGAGGCCAG CTCCCCGTG GCCAACCTCA GGCCTCCAT  
 GGCATCTCAG GGCTCCTCCA GCCAGACTGG CGCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGCT CTGTGCCAGC  
 CCTGCAGGA GGCAGATCAT GTTGTCCAGG CCCAGAGGT AGCCGTCTC ACGGTGCGN TCAGCCAGG GCAGCCTGTG  
 GCTGAGCGTC TGGTGGTCG GCAAGGCCAC CGTCTTCCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGGTCTG  
 GCACGAAGAG GAGGGAGCTT CCTACCAC

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCTGTTTTT TCCTAGCTGC CAAGACTGTT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTTT  
 CTGTGGATGT TCCTCATCTG AAATTTTGAG AATGGAGAGA ATTATTCTGG ATAAGTTGAA TTGGGATCTT CACACAGCCA  
 CACCATGGA TTTCTTCAT ATTTTCCATG CCATTGCAGT GTCAACTAGG CCTCAGTTAC TTTTCAGTTT GCCCAAATTG  
 AGCCCATCTC AACATTTGGC AGTCCTTACC ANGCAACTAC TTCACTGTAT GGCCTGCAAC CAACTTCTGC AATTCAGAGG  
 ATCCATGCTT GCTCTGGCCA TGGTAGTCT GGAAATGGAG GAAACTCATT CCTGATTGGC TTTCTCTTAC AA

SEQ ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTNCTTTTC TGTGGGAAA  
 AAAAAAAG AAATCCTCCA AACCACACCG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA

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GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNAGAT  
CACAGNCCIT CTCCTT

SEQ ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTTCATT ATGTGGCCA GGCTGGTCTC GAACTCCTCA CCTCAAGTGA TCTGCCTGCC TOGGCCTCCC  
AAAGTGGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTTT TTTTTTTTAA CGAAGTTATT TTTCTAGAGC  
ATTCATAGTT TGTTTTTATA CAGTTAAGGT TCTCATCCAT CTGGATTTTT TGGTAAGTGT GGGGAGAATA AAATGAGGAG  
CCNCTGTTTT TTTCTCCAAA TGGCATGTAT TGTCCCAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATAAGATT  
TAACTATTG AACITTCACA TCAAAATTTT GGAACIACAA AGTAGGTITA ACAAGGTGAG AAC

SEQ ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNTC TCAACCTATT CTCAAACITT AAATGGGTAA GAAGCCCACT GGTACGCATG GCAAAGCCCC AGCTCTAATA  
AAAAATGCAA AAAATTGGCT GGGAGTGGAG GCGGGCGCCT GTAATCCAG CTACTTGGAA GGTGAGCTG GGAGAGTTGC  
TTGAGTCTGG GAGGCAGAGG TTGCACTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT  
CTCAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAAC  
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAAACATTC TTAACCACTG GCTCAAAGGA GGAAATGACT GG

SEQ ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCTT GCTCACAGTC CTTCTTGAA GAGTTTAGAA AGCAAAGAAT TCACCGACTC AGCAGGAAGC  
AGAACGAGCT GTTCTTCTT TTGACAAGCA CAAGCTAATC CCCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAAITTAAT  
TCTTTGGTCA CTGGTTCACT GCTGAATAGC CTGGTCACT TTTGGCTCTC TCTTATTTTA GGGGGAAAAA TATTTTNGTT  
TCTTTTTTTT AAAAAATAAA ATGTTGCGAC AATGGGAGAA AATT

SEQ ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCTTAAAA GATTTTTTGT ATTTCITTT GAGACTGGGT CTCAGTCTGT TGCCAGGCT GGAGTGTAGC AGCCTGATCA  
TGGCTCAGTG CAGCCTCTAC CTCCCGGGC TCAGGTGATC CTCCCCCTC AGCCTCCTGA GTAGCTGGGA CTACAGAGGT  
GTGGCACCAT GCGCGGCTAA TTTTGTATT TTTTGTGGAG ATGGGGTTTT GCCATGTTC CCAGGCTAGT CTGAACTCC  
TGGATGTGAG CCACTGCGTC TGGCCTATTA TTTTAAATAT AGTTCTCTTT ACTGCCAGTA GCTTTCATAT AACCTAGCG  
ACTAGATTTA GTCAACACTG CTTAATTC

SEQ ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCTCTCC GTTCTCTGCT TCINAACCAC AGCCGCATCC TATTTGCAGC CCTCAAGATT AAGGATGAAA ATTTGACTTT  
TTAATTTTAT TATTCITGTT CTTCCTTCT ACTTCATTAG AATCATGTTA TTGGCTTAA ATACTGTATG TAAAGGATGC  
TCTGGGGCCC ATCTGGAAGC CTGCATTCTC TGGGATATA ATTACGCTAA GCAATTTTTT ACCAGGGACA GCATGACTTA  
GCTTCTACCT GGGCATCTC TGSCAACACA GCCTCAGT CTCCAAAGG GATTGGCTGC TGTCCCTTCA GGCCTTCTTC  
TTNGTGTGT GTGTGTGTGT GTGTGTGTG TTC

SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GCGCTTCTA CNAGCTGCTG CTGCGCNCI CATNCTGGTG GCGATGCTGC AGCTGCTCTA CTTGTGCTG CTGTCCGGAC  
TGCACGGGCA GGAGGAGCAA GACCAATATT TTAAGTTCTT TCCCGCTCC CCACGGTCCG TGGACCAGGT CAAGGCGCAG  
TCCGACCGC GCTGGCCTCT GGAGGCGTCC TNGACGCTAG CGGCGATTAC CGCTCTACA GGGGCTGCT GAAGACCACC  
ATNGACCCCA ACNATGTGAT CCTGGCCAG NAGCCAGC

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SEQ ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCAG  
 GGAGGTGTTA GCCATGCCTG TTTCTTTTAT TGGAAAAGCT TTCCAGAAAG CCCAGGTAGA CTTCCTCTTC AATTTCATTG  
 GCCACACCTG ATCACATAGC CATCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTCACAG CTCCACAGTT  
 GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTCGTCTGCA CGGCTGCCCT GGAGGGCGTG  
 GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTGTC TCCATGGAGC ACCTCT

SEQ ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCTGGNA GGGGCCAGCC TGTGGTGTCT CTGGGCCTTG CAGCTNTTTC TTTAGGGTTA  
 GCGGTGGTGC CGGGTCACT TTTGAATCT TTTTTTTTTT TTTTCAAAAA GGAAAGTTTT TAATGGAAAG TTGAGCCAGA  
 ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC  
 AGTGAGGAAC GTGCCCG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTTC CCACTTCATA AAAGCAAAAT ATGTAAGACT AGCATCTGGT TTTGTCCCA ATAAAAAAT CCCACAACCT  
 TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TAAAAATCT ATAGCCCAAA  
 TCACCAAAAG GTAAGGAAAG AACTTTCCTA GCAAGCTCTG GAGAAGACCT AATTGNCAT TCAAAATGGA GCTTTCAGAC  
 ACTAATCAAG GCCATTAATT AAAAAAATTT TTTGAGGAAA ATAAGGCAGG TTGGATCTCT TTTCCACTT CATAAAGCA  
 AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GGGTCTTGCT ATGCTGCTA GGCTGGTCTT GAACTCTTCA ACTGCACTCT TGACCTCCCA GGCTCAAGTG ATCTTCTTAC  
 ATAGGCCTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTTCTAATTC AGCTCACAA  
 GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTTCTTA  
 GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAAAGGCC ACATGTGTGC CAGAGTGGCC AGGGCAGGGA  
 GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTGTGT TATGGGTTTC TTTTGAGGGA  
 AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGGCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGCGT  
 TTNTTGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCGGNT  
 CCTGCAGGCC CTCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG  
 CCTGNTGAA GCAGGCCATT NAGGNGCAGC TTCAGCTGGA GCGGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA  
 GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTATAGTAGA GATGGGGT TCTCCTTGT GTCAGGCTG GTCTCGAACT CCCGACCTCA GTGATCCAC CTGCTCGGC  
 CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNCGGNC CGGCCTTCAG TTTCTTCTTA GGCGTCTG TCACCCAAAT  
 AGCTGCTACC CAGAGNGCG GGGTTGACCT AGGCTGAATA TCCACTTTGT TTTTATGGAT GGCNCTTC CCCCATCGN  
 CTTTNCAGA ATATCCTTC AAGTINCANT TTCCAGGGG AGCTCTTGGG

SEQ ID NO:2341: (Length of Sequence = 298 Nucleotides)



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TTTTCCTTAT TACCCGATTT ATTAGAGAGA TCTCTAAAAA GACGGGGTGT GGCGGGGGTA GGTGGGCGAG GAACCTGGGA  
 TGCAAACCAG TGTTTGGGGC CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTTCGAGG ACACAGCACC  
 CTGCTCTGG CGCTTTGGAT TATCAGCAC CAGACCACGG GCGGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC  
 ACACGAGGTT TGCAGTTTCA TTTTGTTCGA GAATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTGAACAAG GTCGTGGTGG TGTGGAATTC TOCCAAGCTG CCATCAGAGG ACCTTCCTGT GCTGACATT GGCGTCCCA  
 TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACCG ATTCTTACCC TGAATGAAA TTGAGACAGA GGCCATCCTG  
 TCCATGTATG ACGATGCTCA CCTCCGCCAT GAGGAAATCA TGTTCGGGTT CCGGGTGTGG AGAGAAGCTC GGGACCCAT  
 CGTGGGCTTC CCTGNCGT ACCACGCATG GGACATCCCC CATCAGTCTT GGTCTACAA CTCCAACCTAC TCCTGT

SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGGAG GAAGGTGGA CCTTCATCAG ACCACTCCCT TCCCCATCC TCCAGGAGAG GGGCAAGGG CAACCCACCA  
 TCTACCCACT TACTAACCTG GTCCTAACCC CCTTACTGTG CGGTGTGTG TGCGTGTGCG CACGCTCTGG CTGTTTGTCT  
 ATATGTCTAG CTCATCTAGT TCCTCTTCTT AAGGGGATGG GGGTCAGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT  
 AGGAGGAGGT GGGGCTATT TCTATGCAA TAGAAATCAG CACATTCCTC CTACTTCCT TTCTCCACT CCCCCATAT  
 CTTTAAAGTG TGAAGCAGA AAAGGACCTG CATTTTCTCT ACAATTGAGG AGCTGACATA

SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TTATGCAAAT TTTATTGAAA TTTATTGTAA ATAAAGNTTT TNCAGTGGN CTAGAAAANC AGCTTGAATG  
 NCATTCAGCA TTTATTGAAG AAGGATGACA TCCCTNCCAC TTATTGCACA AACTTGGTAG CTTTGAGACA AATACAGTAG  
 CACAGTCCGT TTGAAGATT GTCCAAAAA TTAGTCCATA TTTTAGTGGC TCAGTGTCAA GAGTTCCCTC CCTGTGCCCC  
 CACTGTGCT TCTGCAGTA TACGAAGGAT GAATGCTTAA TT

SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTTTATAGGA AGCTGCAAAA GAAATGAGCA GAGCGNGATA TTTGTGGTAA GGGATACAAA GAACATACAA TTGTGTACTT  
 GAGAGGTTTC ATGGAACATT ATGACCCATC CAATGNAGAC ATCAACATTA ACAACAAAAA TTANTTGAGG AAGAGCAGTA  
 TGAAAATATT CTAATGCAGT GCTGTCCAAC AGAACTTTCT GGGGTGATGG AAATGTCCA TATCTTTGTG CTAATACAGA  
 ATCTACCAGC CACATG

SEQ ID NO:2346: (Length of Sequence = 437 Nucleotides)

GTGGAGATTG ATGCTTCINT TTTTGTGTG CGCTGCTGCC CTCGCGCTGG GAGCGAGCC GGAGGGAAGG CGGTGGAGAG  
 ATGATTGCAG AGTTGGTGAG CAGCGCTCTG GGGCTCGCCT TGTATCTCAA CACCTGAGT GCGGATTTCT GCTATGATGA  
 CAGCGTGTCT ATCAAGACTA ATCAGGACCT TCTCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA  
 CTCCTCTAAC CCACAGTGGC AGCCACAAGT CCTACCGGCC ACTCTGCACT CTTCTTTTC GCTGAACCA TGCCATTGGA  
 GGGTTGAATC CCGGGAGCT ACCATCTTGT CAATGTCTG TTGCAATGCA GCAGTCACTG GTCTCTTAC AAAGCTTCIN  
 CAAGATCCTC CTTGGTGAT TGGATACTGG ACATCA

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCCGCGCGCC GCTTCCGCC GGGGCGAGAC CCCCAGGTTT AAAATGAGCC TGTTCGAAAC AACCTCAGGT TTTGGAACCA  
 GTGGGACCAG CATGTTTGGC AGTGCAACTA CAGACAATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCCGAT  
 GATAGCATTG GTGTCTGTC TTTTAGCCCA CCAACCTTGC CCGGGAACTT TCTTATGCA GGATCATGG CTAATGATGT

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TCGCTGCTGG GAAGTTC AAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCTGTG CTTGATGTCT  
GCTGGAGTTA CGATGGGAGC AAAGTGT TTA CGGCATCGTG TGATAAAACT GCCAAAATGT GGGGACCTCA GCAGTAACCA  
AGCGAT

SEQ ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGCGG ANTTGCGCGA CCGCTGTAAAG GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC  
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC  
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCGTCTGTC AGCTGAACCC CACGCAGGCC TTCTTCTGTC TGGTGAACCA  
GCACAGCATG GTGAGTININT CCACGCCCAT CGCGGACATC TACGAGCAGG AGAAAGACGA GGAGGGCTTC CTCTATATGG  
TCTACGGCTC CCAGGAAACC TTCGGCTTTC TGAGNCAGCA GTA

SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCCTCCTACT GATGTCTTTC AGTAGATTCA GAAGTGATTG TGGCAAACAT AGTATCTTGA AGGAAGAGAT CGTGTTTTGA  
TTAGCATCTC CCGAGCCTAG TTTTGTGTTT ATGTTTCATGG TATTGAGGAA ATAAAGATCA ATTGGACTT CTTCACCTG  
TTAATACATC CTAGTTCCTG ACTGCAGCAA AATGACTCTC AGTCCCCCTT TCTCTCTTA GTGATTGCCT AAGATGACAG  
CTTCATTTCC TTTTAATTAT TATCCACCTT CTTCCTCATC TTCANTTGTT TTCTCAAGTG AGGGACTTGG CCTCTACTGG  
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT  
CAAGCAATTC TCCTGCCTCA GCCTCCCGAG TAGCTGAGAC TACAGGCGTG TGCCACCATG ACCGGCCAAT TTTTGTACT  
TTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCCGAAGTCC CGACCTCATG ATCCACCTGN CTCGGCCTCC  
CAAAGTGCCG GGACCACAGG CATGAGNCAC CGCACCAGA AAAAGCAAAT CTCTTAGTAT TTTTCTCTT GTCCAAAAGG  
TTCTGACCAT GTTCATGAC

SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTTGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CCTGAAGATT TCTCAACTAA GAGTCTGCAC  
CCATGACAGC CCACCGAGC CCTCGCTCCA AGTTTGTGGA GAAAGGGAAC CCGTTTGGCA GCATGTGGAA AGACCCCAAG  
ATGAGCAGCA GACACAGCAA CGCTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC  
TGTATGAGAC AGCAACAGCC AGAACAGACA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA  
GGGAGCGCG CAGTTCCCAA AATCACCTCT GGCC

SEQ ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTGTGTGTGTT TAGTGAACA CTCAAATCAA AAACAGGCTC ACGTCTTGAA TAGTCTTCTG GTCTAAGCAA CTCAGCACCA  
GCGCCGCCAA GGGGAGGCGG CCTTGTCTT GGGCCCGGGA AGAGACGCG AGTCCAGCCCC GACGAGACC CCATGGCGCA  
CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTTGC GGGAGTCCG TGGGGGAGGG TCCCTNGCTG AGGCTGCACC  
AAGGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGN GAGCTTGGGA TGGGAGCCGT GAGGTGGGGA TGGTTTNGCA  
GAGGGGCAGA GCCAAGGNCA GAGGCAAGTT CTNGGGCCCC ACAAGCTTAT GGTGTGCA

SEQ ID NO:2353: (Length of Sequence = 369 Nucleotides)

CTGCCTTATA TAATGTGGAT GCTGGGCACA GAGCTGTCAT CTTTGACCGA TTCCGTGGAG TGCAGGACAT TGTGGTAGGG  
GAAGGGACTC ATTTTCTCAT CCGTGGGTA CAGAAACCAA TTATCTTTGA CTGCCGTTCT CGACCAGTA ATGTGCCAGT

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CATCATTTGGT AGCAAAGATT TACAGAATGT CAACATCACA CTGCGCATCC TCTTCGGGCC TGTGCGCAGC CAGCTTCTTC  
GCATCTTCAC CAGCATCGGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACCTG AGATCCTCAA GTACAGTGGT  
GCTCGCTTTG ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEQ ID NO:2354: (Length of Sequence = 363 Nucleotides)

GGAGAGGGAT TGGCATCGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAAOCATT  
CCTGCTCTG GATACTGGAA GACATTCTGC TGCATCTNAG GATTGATTCC AGTGCCAAAC TGTCTCTCTA TGTTCCTGT  
CATGCCCTG CTCACCATGC TGTTCGGT GGCCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG  
AAGCAGGTGG GGTTCCTGGG ATTGTIACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCTGAG GAAGACGGG  
GTINCCATT TNACTGGTA GTCCAGATGA GGGAGGGAGG GTT

SEQ ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGGCCTC CTCATGTCTG AGGTAGAGTA AGACGGTGT AGGGGGCGGA CCGGGGGCG GAGATGAGCA  
CCGGCCGCAC TGGGGCATCA TCCNGGCCA CCGGGACGA TGGGCCGTGG GAGGGCTCAG GCGGTGTGG TGGCCACACT  
GCGAAGAATG GATTTTAA ACACTTCATA GCCCCANIT INTTCAGCT CCCTCTCGT GGACACAAC TCAGGGCTCC  
CTGTCTACTG GCTTTCGGG GTGGTCTCCC CACTTCAGA GTCTGGTCTC CACAGGACAC CGTCTTCCC TTCCCTTCCA  
AGGGGCAGGN CCCACGNACC CTCGCCAAA AANTAAAGGA GCTTGTGT TTGAAAACGCC AAGGCAAGCC GTCCAAGGA  
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACACGTGTAC CTGAGCCTG AGAAGCCAAT TCAGATTCAA CCCTGAATTT  
GGTTGATTG GATTAAAGTA CGCAAAAGT CAATAGAACC ATTGANTTTC AGAAATCATA AAGTTGCACT ATGCCAAAGA  
AAAGAGTACA TGTGAATCAA GCGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANTT CACATAATTT INTTGGCCCC  
GACAAAACAT TTAAGCAGTT AATTTTGT TTGTTTGT TTGTTTGT TGAAGAACAN TTGTGGTCTT TTACATTTTC  
TTGGTGGGAG AGCAAAATCT GATCAGCATT AGTGTGTGA AATACTTTTG GNTATCATC CCCCAGTNT AGGGTGAGAT  
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTNGTT CACTNAAANT GCTTGG

SEQ ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCAACAAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC  
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTT TTATGCCCTG CCCCCTTCCC CCAAAAACC  
ACCTGCAGAA CCAAAATGTTT CTCCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC  
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG  
GAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTT AAAAAGGNTA ATAAAGGTGC TCGTACTTGT  
ATCTTCTTCC CT

SEQ ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGGCAGC AGGTTCAGT GGGGCCCTT GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT  
GGCGATGCCA ATGCCGCTGG TGCTTATTAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT  
CCCCCCCAG GAAATGCCC CAGATGCCCT CTTCATCGAT GACGAAGCAT TTAAGCGGCT GCAGGGCAAG AGGAACOGAG  
GGAGAGAAGA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTCAGT GGGGCCAGC AATGGATGAC TAAGTCATTG  
ACAGAAGAGA AAACCATGAA GTCAATCAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGGCGG AAACACCAG

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SEQ ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCGG AGGTGTACGA CAAGATCTGC AAGGCCGCCA  
 GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT  
 TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC  
 AGGGGGGCGAG CCCAGTGGAA TGGAAAGAAT GTGGGATTGT GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAAGTC  
 ATTAGCTGTG TGACTCTGGG TGAGTCCCTT AA

SEQ ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTTCAG CATAGTCATC TTAGCTTTAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCINCTAAAT GAACGGCTGA  
 TTTTCTGCC AAACATATGA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCTACAG GACACTAAGG  
 GTTCTTACAG ATAAAGGGAC GATGCATTCA TGCCCTGGAGA ACTAATCACA CCTGATTCTT CTGGGATCTA AANTAATGTC  
 AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTTNTT TTNTGCAA CCNCTTTCAA GANCAATGCT GCCCATCCCA  
 TGCAAGATGT TGTGTAAAGG CCANCTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT  
 GTATGGCCTG GCAACTAAAA AATGTTTTTT ACATTTTAA ATGGTTAACA AAATTAAAT AAGAGAATAT TTCATGACAT  
 CATCAAATTA CACGAAATGC AAATTTGAGC ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCCTCAT CCGTTTGACG  
 GCTATCCCTG GCTGCTTACA GGGTCCACAT AGTCCATAAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG  
 TCCCAAACA CTAAATCTGA AATGTTTTGC ATCAGAAACC CTGTGGGGC TTGTTAGGAA TGCAAGTCCC TGGTCCACA  
 NCCAGTCTCT GGATTGAGTA AGTCTGGAGC AGGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTGCCCTGG CTGGACTGG CTAGAATCTT TCTCTGGACT NTGTCATGTA CAGTGNCTCC ATCCTGGAGG  
 CAAGAGAGTT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCTN CTGTTGCATC GTTTGAAGCT GACGTCCCTG  
 GTCTNTACAC TGCTGCCACT GTTGINTCCT CGNTCTGCTT GCTGTTGCCT CAGGCCAGN CCGTCTCTGC CGTGACANCC  
 TTCATCTTAC CCTTGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGGAACA

SEQ ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGINT TGATAGTTCT ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCCTCCTT ATCCAAAGAT GCATGGTTAA  
 AATAATATAG ATTAGGAATC ATCGTTACCT CCAAACAGTT AATTCAATC AAATTTTATG CCCAGACTGG TTTTAAAGA  
 CATTCTCTGC CAAAATTTTT TGAAGTAAA CACATTAAGG GTAGGTGTGG AGAACGATTA ATGGATTCTT TTTTATACTC  
 ACATCTGTTT TGGAAATATA TTTTATSCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGTCTGGTT TTAGAAACAC  
 TAAAGATCT CCAATCTAG GAGGCCTTAA TTGAAACTC TGCITTTATT TGCTGAACCT AGTGGCTAAC CTGINTAGGC  
 ATCTCACGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGT CCTCGAGACA TTTATTTAAG CTAATCTGTC CTGATTTTTT GACTTTTACA  
 TTCATTACAC CCAGCCACAT TAGCCTGCAC CATTAAAAAC ATTGATTCAA CCTCTCTTAT TGGCATAGAC AATACATCTG  
 CCTTGTTTAC TACTCTATCC TCAGCTTGGT ATTTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT  
 GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGT ACCCTNGATA AGTTCTAGA  
 GAGGGGAGGT TCTA

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SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TTTAATAAGT ACTTTATTGA TATTATATCA CACAGCACTT TACAGTATAC TCAAAGATAG CCTAAATTAT  
GAATTAAACA TGCAAATATT TNCITTTCCA AAATGTTGGAC AAAATGTCTT TTAGAGTGCT TTTGAACACT AGCCTTAGCT  
ACTAAGCAIT CATGGGTTTG ATCTTTCITG CGACATGACT TTAAGTAAAGT TAACAAAAAA TGTAGCTGTA GACAGTAATT  
GTTTGATAAA TATGANCAGT TTTAAATGG CACTGAATTT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC  
TTGTGTCTCT AATCTCAAC CTCGGGGTTC TTTAAAGGCG TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT  
CTGTAAGNNG TCTATGTCTT CAT

SEQ ID NO:2366: (Length of Sequence = 294 Nucleotides)

CCAGCCATAC ACATGCCITT ATTTAGATCA GCTTTTTTCA AAATGCAGCC AAAGTTATGA GTTGGACAGC CCAAAGTAAC  
CAGCCCTATT CCACTGAGTT AGTTTACCCC ACAGCAGTAG AACCCAGTGC TGGTTTGGTT CCTGGCCCAT GGTGGGACAG  
CGTGAAGGTG ATGGAGGGCT CTAGCACAAG GAGGTGCTGA GTGCCACCG CAGGTGCTTC TGCAGACAGC CTAGAGCAAG  
GTAAGCAGGA GCACTCGNTT CAGAACCGAG GCGGCTCGGA CCAGAGGGCA GGCA

SEQ ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGCTGACTT CCACGTTTTT GTCAGGGATG TGTTCAGCA TGTGGATTCC  
ATGCAGAAAG ACTACCTGG GCTTCTGTC TTCTTCTGG GCCACTCCAT GGGAGGCGCC ATGCCCATCC TCAAGGCGCG  
AGAGAGGCGG GGCCACTTCG CCGGCATGGT ACTCATTTG CCTCTGGTTC TTGCCAATCC TGAATCTGCA ACAACTTTCA  
AGGTCTTGC TGCAGAAAGT CTCACCTTG TGCTGCCAAA CTNTCCCTC GGGCCCATCG ACTCCAGCGT GCTCTCTCGG  
AATAAGGACA GAGGTGACA TTTATACTC AGACCCCTG ATCTTNCGG GGCANGGGCT NAAGGTGTC TTT

SEQ ID NO:2368: (Length of Sequence = 187 Nucleotides)

GATCTTGAAG TTAACCAGT GTTAGAAGTT TTGGTGGGA AGACAATTA GCACTCTCTT CTGGANGTAA TGGAAGAAGA  
AGAGCTGGCT AACCTGCGG CCAGTCAGCG TGAGTATGAA GAACTACGGA ATAGTGAACG TCCTGAAGTT CAACGACTTG  
NAGAGCAAGA NAGGCGACAC CCAGAAG

SEQ ID NO:2369: (Length of Sequence = 341 Nucleotides)

GTATCTTTAG TAGAGGCGGG GTTCCACCAT GTTGGCCAGG CTGGTCTCGT ACTCTGACC TCAGGTGATC ACCTGCTCC  
TCGGCCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCCTGGCA CCATCAGTTT TTGATCCTGA TACTTGTCTG  
TCTCTTGGT TCTCTCATC CCTAATTAA CCTTGAACAC AAAATTCAAC AGGTTTGGC ATATAGAATA AAGATTATCA  
GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCTGA TCTATCAGCA ATATTTAATT TGCTAGAAA  
TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCAAA ATGCCAGTAT GCAAAGGACA CTGGGGCAG CCTCTCAACA TTTCTGCCT GACTGATATG  
CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAACATGT CTCTGTCTT ATTGAAGATG CCTATGCTCA  
GGAAAGGGAT GCCTTTGAGT CCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTCTCGC TTGGATACCT  
TGGAAGTAG TAAGAGGAAA TCCCTACAGT TACTINGACTA AAGATTGAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA  
CAACACACAC TTGGATC

SEQ ID NO:2371: (Length of Sequence = 320 Nucleotides)

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CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCTT GCAGGTGCCG TTAGCCCTGT TTGCACTGG  
TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT  
CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GCNTGGGACT GGAGGCCAG GTGAATCTTG  
TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCGCGGCCCC TTCCACCCA AAGGCCCTAG AACCTAGGC CTTCAATCCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCTGGCA TGCGCGAAA AGTTCTTGA GAAGGCTCC CCTCCCAA AACACCGAG AAACGTGGG ACCTCATTAT  
TGAGTTTGAA GTGATCTTCC CCGAAGGAT TCCCCAGACA TCAAGAACCG TACTTGAGCA GGTCTTCCA ATATAGCTAT  
CTGAGCTCCC CAAGGACTGA CCAGGACCT TTCCAGAGCT CAAGGATTTT TGGACCTTC TACCAGTTGT GGACCATGAG  
AGGCTGGGAG GGCCAGGGA GGGCTTTCGT ACTNCTGAAT GTTTTNCAGA GCATATATTA CAATCTTCA AAGTCGACA  
CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGGCG TAGGATGGCT CCAGCTTCG GTGAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA  
TGTACTGTG GTGTGNTCTC AGAGCCGCA CGGCCTTGGC CCTGGACACA TTGGCCTGCG CCATCACCAG CTCAATGTCA  
CGCAGTTCCA GCCCCGCTC GTCCACCTCT TCCTCTCTCT CCTCTCTCTC TTCTTGACAC TCCAGCCCA CCGGGGCGCT  
GGTGCTGAC TCAGGGACCA AGGCTGAGGG CTCTGAGGGA ACCTTAACT TCTCAGCTGC GGCTTTGTGC ACTTGCTGGG  
ACAAGGTCTT CAATCTTGGN CTCGCCAAG ACCACATAAG T

SEQ ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGGCACITA TTGATGACAT TGAGAGGCTG AAATATGAAA TTNCAGAGGT GATGACAGAG ATCGACAATC  
TAACTTCCGT AGAGGAGAGC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATTCAA CATGNTCCC  
AAAAAGGGAA TTCAGTTTCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCCCAGTTCC TTTATAAAGG  
AGAAGGCCTA AATAAGACCG TCATTGGGGA CTACCTGNGG T

SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGTTTAGTG CTTCCTTCAG GAGCTCTGGT AGGGCAGGTC TGGTGGTGAC AAAATCTCTC AGCATTTGCT TGTCTGTAAA  
GGATTTTATT TCTCCTTCAC TTATGAAGCT CAGTTTGGCT GGATATGAAA TTCTGGGTG AAAATCTTTT TCTTTAAGAA  
TGTTGAATAT TGGCCCCAC TCTCTCTGG CTTGTACAGT TTCTGCTGAA AGATCTGCTG TTAGTCTGAT GGGCTTCCT  
TTGTGAGTAA CCGACCTTT CTCTCTGGCT GCCCTAACA TTTTNCCTT CATTTCAACT TTGGTGAATC TGACAATGT  
GTATCTTGA GTTGCTGTTT TCGAGGAGGC AACCTTTGTG GCGTTCTCT GTAATTTCCC CGAATTTGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGGG AACACAGCCA GGTGCCCTCA GACCCCTGGA TCTGCACAAG GGGGGCCTGC CCCCTCGCCC  
CAGCTATATA CACGACAGCC CATCTGCTG GCGTGGACA AAAGCTGGGA GCTCTGTGC CCAGTCAGGA GCGCTACAG  
TCCACCAGCT GCGCGGCCG GTCCAGGGG CCACTGTGGT GCCAGNAGT TTNTCAAAC CNAGGGCCCA GCGCCAGCTG  
GCNCTNGCC AAGCCCCAGG CTTGTTTGT GGGATGGAGC CTCCACACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG  
CAAT

SEQ ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTATTATGTT TTATTTATGT ATTTAACTG ACTTATTTGT GTATCCCACT AGAACAATAC ATTCAATA TACTTGAGA  
ACTGTGCTG GTGCGTCATG GGAGCAGAGA ACTTGTCAG TGAATAGTTG TTGAAGAAAG GAGTAAATC TCCCCAAAC

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CCTAAAGGCA TCCTTTTGGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCCAAGAA  
GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCA GCTCTCTCCG NCTTCTGTGG  
GGAGGAAGCC CTCGGTCTT TCCGAGGAAC CTTCAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACCT CATCGACAAC ATCAGGAAGG TGGTAACAAA CAAATGCTTT ATCAGGCTGG  
ACTTCATTTT AAACCTCCCC AAAGCACAGA TCCATTACGC ACATTTAAAG ATACCATCTA CCTTACTCAG GTGATGCAGG  
CCCAGTGTGT CAAAACAGAA ACTGAATCTT ACCGCGGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG  
GCACTTTATT GGCAGTTGAA TGACATCTGG CAAGCTCCCTT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAAATG  
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACGTGTGC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT  
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGTNA TTAAANGTGT ATTTTNTGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT  
ATTATAGCTT CCTTCTGTG AACCATTAG AAAAGATGGC GANAGTCAAC ATAAGTAGAG ACCTCATCCG TAGNAGATCA  
AGGAGCGGGG TGCCCTTAGC TTINAGCGGC GCTACCATGT CACTGTNCCC TTTATCOGGC GGCT

SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGTTTGAAA TATCTTTTIG CAATAGATAA TCTTATTTAC ATTAATACAG AATCATTTTA CATTCCTAAA TCAGACACTA  
ATAGATGCTT TATTTTAGTG AATTATAAG GAAAACAAA AGGAAACTGT TGAGAAGTGT TCTTCATTAA CNGTCTAAC  
GNCAGCCCGA AGATCCNGNA ACACATGGAA ACTGCGNCAT GCINCCNGCA GAGGCTGGGG AATGGGGGTT CTGCTCTCAC  
TGAATGGTGG GGAACCTTCA ACTGCTTAGC CTGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTTTATTGTA TGANCCACAG TGAATAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG  
GGAGGTAAAG GGGTATCACA GCAGGCAGCC TCCTCTGNTT CTNTCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT  
GCAGGTACCC CACGGCGGCC TCAGAGGGAC AATTINTTCC CTCTAGAAG CCINTTCCAG TGTTCCTGAG ATGNTTTGAG  
GACAGNTCTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTGAG TTTTGAAAAA TCTTATTTGT TGCTGCACAG  
GTTAATAAAT TATCAATTG TAATTACGCA TGTGGTTCAG AGACACGGTC ACTGATTCAC ACCAGTCCC TGCCACAGAC  
CGTCTCAGAC ACGCACAGTG GGCTGCTGC ATGATTACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCACAGTGG  
GCTGCTGCA TGGTGTGTTAC CTGGCTTTTG GCTCCAGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA  
TCACTCACAT ATGTACATGT ACCCACCACA AACGTGCAAA GCTCCTTGCA CACATGCATG CACACAAAG TGGTACACAA  
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCCCTTTC ACTAGCCCT CTGGGTTTG CAACATGCTT TCTCTCTCAC CTTCTCATTG AATGAGAAAA AACAGCCCAG  
CCATTTTTTG CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTGACT TTCACAGTAA CTCAGTTTGA  
TGTAGGCAGT CCAGGCAITA TTATTTTCAT TTTACAGATG ATGCAACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCATA  
GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGN CTTACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

CCAGACTTCA TGGAAGGTG GCTGCTCTG GGGTGATGGT GGCTGGAGAG GCAGACTTIG AGGCTGCCAT GCTCTTATT  
TCAGAT

SEQ ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCCTGATCC  
TTGTGGACGA ATGTNCCCGG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTACA GGCCTCGGGA  
AAGGC

SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTINATT CATTCTCTC TATTAACTTC TCTAAAGGAA ATTGGGCACC TGTAATCCCA GCACTTTGGG AGGCTGAGGT  
GGGTGGGTCA CTTTINAGGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAAA  
NTTAGCCAGG CTGGTGGTGT TCGCTGTAA TCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG  
CGGNGGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GTGAATTTAT TGGTTCATGT AACTGGAAAG TCTCATGAAA ATGTCAGCTT CAGGAGAAGC TTGACCCAGC  
AGCTTCATGA TGTATGGAAA TACCTGGGTT TTTTGTCTCT NCTCTGCTAC TGTGGTATCA GCTTTATTC AAGTCTGGCT  
TCCTTTGTG TTGCAAAATG CTTTGTGAGA AGAAGCCTGG GTCCATCTGT TAGGNTTAAG TTTACTCTGT ATGCTGTAGT  
AGTGGCTATG ACAAGATTAG GAAGTGATT TTCTCTCTCC ATATTAAAG

SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCATCTGTA TTGTACATG AAATGCACAT CCAAAACGGG TGAATTGGAA ACGACCTATT AGGTCACAG GAGTCCGGCC  
CCTGGGGGCA AAGCCTCATC GATGCCACG GCGGTGGCC AGCACTTTC TTGGGCTGTG GGTGTGCAC CCGCCTCCC  
CAGCGGAGAG TCAGCTACA CCCAGGCCC TTTAGCTCTC TGGCAGCAGC TCCAAAACG CACTTGAGGA ACCAATAATT  
CCTTGGGGGT TAATAGCTGT TCCCAAGAA AAGGGTCTG TGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT  
TTAGGCAAGA AGCTTTCTA TAGGGCTTTG TCAGAG

SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAACTTA AGACGGCATT AGAATTCTTA AGAAAAGGTG TAAATTTAA AAAGATGTGC AAACAACAAA  
GAATGCCCGA CCTGAACCA GACCTAAGC ACCTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG  
GACACCAGGA CAGTGAGGA CGGGTGGCTG TTCAGTGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCTNCAGTGA GGAGAAATCC CGGGAACGT ATTGACACAA AGATTCTNAT TGCACTTGTA  
TTTTNTATT AAAGTTGCA TGGTTCTAA TAAAGGATTC AAACATAAGT TTGTAGTGA ATGGCCTGGN AGATTCCAAG  
GGCTTCTCIN GAAGGGGGAT TNGCTGCAN TGTAGATTIN CCTCTGAAGG AGGCTGGCCC CAACTTGGN CCTCCTCATG  
ACCCCTCTCT

SEQ ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGG TCTCGCTATA TTGCCAGGC AGGTCTOGAA CTCTGGGCT CAAGCTATCC TCCGCTCT  
NAGCCTCCGT TTCCAGAAG TCACCAAGTA ATATCTGNT TTCATCAGT GCAGTTAAGA TTTTNTTTC TTGAAATACT  
GGTTTTCAAA CAGATCAGAA TTACCTGGG AGCTTGTTA AAATATAAAT GCCCCAAGGC CAGCTCCAGG ACATTCTGAC



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TCCATAGGTA TGTGGTAAGC CCAGGGAATC CAGGTAAGCT CAGGTAAGCC CAGGGTAAGC CAGGGAATTG TTAACAGGAA  
GCTGGTGGGT TTCTGGCACC TNGACANOGA CTGAATTCTA GGTAGCTTGC C

SEQ ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTTCAGCA GGCTATGAAA TTTGTGGGC ATATAANAA CTGGAACCTT CAACAGGGTG GTTTGAAAC TAGNGCATT  
ACCAATAAAT GNCAAAACCA CAAGGACAGT GCATTGTGTC ACATAGANGA TCTGGAAAGT ACAGCTGTAA ACTATAATCN  
CCAGTCTCTG AGTTAGCACC TTCCACGNT AGTCCTTAC

SEQ ID NO:2392: (Length of Sequence = 234 Nucleotides)

TGCTGAGGT GTTGGTTTG GAATAGGGAA AAAGGTAAGA GACTAACGTG GAAAGGTGCT AACTCAGAGA CTGGAGATT  
TAGTTACAG CTGTACTTTC CAGATCTTCT ATGTGACACA ATGCACTGTC CTTGTGGGTT TGTCATTAT TGGTTAAINC  
TCTAGTTTCA AAACCACCT GTTGAAAGTT CCAGTATTT ATATGCCAA CAAATTCAT AGCCTGCTGA ACTG

SEQ ID NO:2393: (Length of Sequence = 337 Nucleotides)

TCCAGGGCG GATTGAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TCTGCCATC TACAGGACAT TGAGAATGCC  
TATAAGAAA CCTTCTCCC TGAGATGAGT GAAAAATGTG AGGTTTACA GTATTCTGCA AGGGAAGCTC AAGATTCAA  
AAAGGTGGTA GAGGACATTG AATACCTGAA GTTCGATAAA GGGCCGTGGC TCAAGCAGGA CAATOGCACT TTATACCACC  
TGCGATTACT GGTTGAGGAT AAGTTGAGG TGCTGAATTA CACAAGCAIT CCTATCTTIN TNCGGAGT CACCATTGGA  
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAAATGTTA TTTTATATAC AAAGAATTAT CATGGTTTIN CATTGAGTAG ATGCCCCGGA TAATCCTCTG AAGGAAGAGC  
ATTTAGTCCA ACTTAATGAA ACCGATATCC TTCGGTACT GACGGAAACA CTGGCGGCAC ATATTGAGGC CATATTTCCG  
GATCANACCG TGCCGGTTG AACAGACAG ACAAGAGCGA GAACCTGCC C

SEQ ID NO:2395: (Length of Sequence = 335 Nucleotides)

CTGAAAGCTG TAACACCCTC AGGTAATAAC AAAAGGGATT TTTATTTTAC AGCTAAAGGG AAAATAGGTG GAGAAGTTAA  
AAAATAATGT CTGATCCTGT TCCTAAGTTC CAACTATAG CCAACACTCT GATGCTGCTC TTTTCTTGT AGGACCAACC  
GTCCAGTTT GCCTGGGACT TTCTCATTTT TACAGAGTCC CAAATCTAG GAACTGGAG CAACTGGTAC AACTGGTCAC  
CTACTCTGC CCCCCTGGTA AATCAAGNCA ACTGTGACCA TCCATGTGC CATCTTACAG GGNAAAGTTA TAACCCACTA  
TTCCCTATA ACATA

SEQ ID NO:2396: (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCGTCC TGCCGACAG AGCACAACCC TGCAACCCA CCATGGATGT CTCAAGAAG GGCCTCTCCA  
TGCCAAGGA GGGNGTGGT GGTGCGGTG AAAAGACCAA GCAGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG  
GTCATGTATG TGGGATTACA TTTTTTTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEQ ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAA GAATGTGGCA ACTTGCTTNT NOCTAAAAGG AGGAATTGGA ACTAGAATGT GTGACTCTGT GGGGACTGCA  
TAGGTTTGT AATTGACCTA TAGCTAAACC TTAATGTGTT TGTGTGCTA TACATTGCTT TCGCAATTC AAGACATCCA  
GACGCTATTA CCAACATTTT CCTGTGCAIT AACCTCTGCA TGTGAAACT TTTACAGTT ACTGAACAT GTAAATATGT

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GAATTTTTTT ATTTAGGTGG ATGCATTTTT NGTCTGTTTA CTGCTCTTCT CAGCTTTATT CAATAAACTT GCAITTTAAG  
GGTTGTATTG GCAATTTTAA CTTAAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEQ ID NO:2398: (Length of Sequence = 421 Nucleotides)

GACAGGTTGG TCTTACCCAC TGGNTCCCAG TCATGCTGTA AACAGGGCTT GCTTTGGAGT CTGTCAGACC TGGCTTAGAC  
CCAGGCTCTG ACCAAATGGG TGAGTTATGC AGCTACTTGG TGGCATCTAA TACCCTATCG CAAAGGACTG CCGTGAACAG  
GAAGGAGGTG TCAAATTTGG CAGTGCCTGA TGAGGTGAGG CCAGGACCCA GGAACCTCTA TTCCCTCCCA TGCTCAGGAA  
CAGTAAGTGT TCTTCTATCT GCAGAGGTAG ATGCTTAGCA CATCGTGGGT ACTTCACTCA TGATTGCTAA AATTTGAATT  
TGTGGATAAA GTCATTTCAA AAGTCAGATT CTAGGACCAA AAATACAATA TCTGTCCAAC ATGGAAGTGT TAGATCATGG  
TTTTTCCTTC CAGCCCCAGG A

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTGAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC  
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGCTGCTGC CCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG  
TGGCCCCCTT TTCTTGACCT CCTCCTCCTT CAAGCTCAAA CACCACCTCC CTTATTTCAGG ACCGGCACCT CTTAATGTTT  
GTGGCTTTCT CTCCAGCCTC TCTTAGGAGG GGTAAATGGT GAGTTGGCAT CTGTGAACTC TCCTTTCTCC TTTCTTCCCC  
TTTCTCTGCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTCAGTC TGTGGTCACA TCCAGTGGAT TG

SEQ ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGGAAGG ACTGGCACAA GTTCTGCCIN AAGTGGGAGC GCTGCAGCAA GACGCTGACG CCCGGGGGCC ACGCCGAGCA  
TGACGGGAAG CCGTTCTGCC ACAAGCCGTG CTACGCCACC CTGTTGGGAC CCAAAGGCGT GAACATCGGG GCGCGGGCT  
CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGCAGGT CACCGGCCCC ATCGAGGTCC CCGCGGCCCC AGCAGAGGAG  
CGGAAGGCGA GCNGCCCCCC GAAGGCNCA GCAGAGCCTC CAGTGTACC ACTTTCACCG GGGAGCCCCA CACGTGCCCC  
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

CATCCACCCA GGGATTAGGG TTCAAGTAGC AGCTGCTAAC CCTTGACCA GCCCTTGTGG GACTCCCAAC ACAAGACAAA  
GCTCAGGATG CTGGTGATGC TAGGAAGATG TCCTTCCCCT CACTGCCCCA CATTCTCCCA GTGGCTCTAC CAGCCTCACC  
CATCAAACCA GTGAATTTCT CAATCTTGCC TCACAGTGAC TGCAGCGCCA AGCGGNCATC CACCAAGCAT CAAGTTGGAG  
AAAAGGGAAC CCAAGCAGTA GAGAGCGATA TTGGAGTCTT TTGTTTCATC AAATCTTGA TTTTTTTTTT TCCTAAGAG  
ATTCTCTTTT TAGGGGGAAT GGGAAACGGA CACCTCATAA AGGGTTTCAA AGATCATCAA TTTTT

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTTG GTATCTCTAT TAAAGTACAT GANCTCCAA GGAAAATAGA GCGATTTACT CTTCTCCAAT CAGTGCAAT  
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG  
CAGATGTCTA CTTGGAATAT ATTCAGCGAA ACTTACCTGA AGGGGTGCC ATGGAAGTAA CAAAGACACA ATTAGAACAG  
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG  
AGGCCATTTT TGCTTAAATT TTGAAATGAG GGTGGGCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)

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TCATTAGTT ATACTCTGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTGCAAT AGGGATTCTC TAATCTCAT  
GTAATCIGT TTGTACCAT TTTACTTG TCCTTGIGG ATCTCTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG  
TGTATTGTA TGAAATGTC

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

TTCCCAAAGT GGTTGTAACA TTTTACACTC CTAATAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATT  
GGTGCTGTCA ATCTTTTAAA ATTTTAGCCA TTTTGIGGT TGTATAGTGT TATCTCATIG CAGTTTTAAT TTGCCGATCC  
CTGAATGTGT GTAGGTGTGT ATATGTATA TATAATATAT ATATNATNCT TCACTTATT TTGAAGTAAT TTCAAAGTTT  
CCAGAATAAT ATCAAGAACT CCTGTACTCC CTTGCCAGA TTCTCCAATT GTAATGTTTT ATTGCATATG CTCATTGCC  
CATTCTCTC TCTACTATA GCTTGCATTA GIGTTTTCTT GGAACCNITA GAGATGAAGG TGGAAAAAAG GATGCGGGT

SEQ ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGT GACCTGACCA CCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTCA CACAGGAACT CATCTCTCA  
GCATGAGGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGACAGAG CCAAACAAAT GTTTGGACCC  
CAAGTGCTTA CGACCCGGCA CTACGTGGGC TCAGCAGCTG CTTTTCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG  
TCCTGGTGT GCCTATGGGA CTGCTCAGCC CCCACTCAC TATGGGCCCA CACAGCCAGC TTATAGTCTT AGTCAGCAGC  
TCAGAGCTCC TTCGGCATTC CCTGCAGTGC AGTTACCTAT CTTAGCCAC AGCCACAGGC CTATTGCTGT GCATGGGCCA  
TTTT

SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTTTATTG TCTATAATTA GGGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTGTCTTA  
ACACAAGATA TATAATGNC TAAATYAGTT AATTAAATTT YAATTAAM CAGCTGCTTT GGAAATCCAA CATGTACT  
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAGG NGAACAAAGG  
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEQ ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAACGCAC TGCTCTGCCC TCAGTCAAC  
ATGAGGGGAA ACACACATAT GCTTTTAAA ACATCTGGCT TATAAAAAA CATCCCTAG AAAGGCTCC AGAGAGGGG  
TGTGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCCGCC GCTCAGCCCT GCGCCCTCCA CTGCAGCCAT GGGTGGGCC  
TCCCCCTACT GCGTCCCAG GGCTCTGTC AGGTGCTCT TGATGGTGT GAGGAAGTCC GTGGTGTCA GGAAGTCTC  
GTTCAGCTC ACATTGCTGA GGCCGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATNGNTTGG GTTCGNAGA AATGGATGTG CGGAAGAAGA AGAAGAAAAA AAATCAGCAG CTGAAGANC CAGAGGCAG  
AGGCCTGTG GGGACAGAGC CCACAGTGA GACTGTGAG CCTCTGAG TCCGTGTC GTCCACCACC AAGAAGAGGA  
AGAAGCCCAA AGGGAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEQ ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCTCTCAAG AATTTAGAC CAATGACCG TCCTGTCTCT TTAAGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA  
GGCGTTGCA CAAACCATAT TGGACAGAG ATGGGGCGA CCCATCGGA CCCGAGGGC CTCTGACTCC AGCAATACAG  
CGAATCAGC GCTTTCGGA ATACATTTT CGGAAAAAGA CTTCTCTCT GGTTCCTGC TCTGCACAG TTGAAATTT

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CCCCAGTTT TCTGTCAGAT CGGGAGTGA GCAATGCTA CCCCCGCTC CCGCACCAGT TGGGCGCTCC CGGATGATGC  
CCTACCCCTT T

SEQ ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGAGC GTGCATTCCC AGTGGGCGAA CGGGAATTGC AACGGAGAGA GGGTTATCTT GTGGGGGGCT  
ACCGTGGAG AGCAAGGCGC CCCCAGGGT TGGTCCGTG AAATTNAGGT CGCCC

SEQ ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GTTCTCTTGT CCCCCAACT TTACCGGAA GCCCCAGCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC  
TGACGGGTCC AGATACGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTG  
CCTCTNTCTG GCTCCAGAT CGTCAAGGC AAATTGGCAG GCAAGCGCA CCGCTATCG AGTCTCAGC AGCTGTCCCC  
AAGCTGGAGA AGCGACCTG CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CCTCAGCCCC CCAGGGCACC  
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TGCACCGGTG CACCAGGTGC CCGTGTGGAT TGTACAGNN ACGTGGGTA TGAAGGTAAC CACCTACCGN GTGCACGTGG  
CCNAGCAGCA GGACGTGCAC CTGACTGTNA CGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAATT GCCCGTGCAG  
CTCTCACCA TCCGTGTGGC CAGCACCAAC CCGTGTGTG AGGCCTTTGA CATCTGGCTG AACTCCACTG AGTACGGGA  
GCTCTGCGAG AAGCTCCGGG CACCCATCCG CAGGGCAGCC CATGTGGTCA TCCACCAGAG CCTGGGCGAC CTNTTNTTGG  
AGACATTGTC CTCCTGTGA GAGGTCAACC CGGCTACTC AGTGCCAGC AGCCAGGAGC TGGAGGCTG CATAGGCTTG  
CATGCAGACA CGTGCCAACG TGAAGNTGGT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TMTTAATTNC  
CGCCCCATGT TGTGGCTTA ACTTGATNGG GAAAGTGGT TNGNCAAGCG GCAAGACCCC CTTGGGNCCT NAACTTGT  
TGGCAAACGG GGTNCTGCA TGG

SEQ ID NO:2413: (Length of Sequence = 203 Nucleotides)

TGCTCCTCCC ACCCCCTAGC CATGCAGNGG TGAATNGGG AACCCAGNN GGGGGCTGAG AAGCTCCAGG CCACCTINAG  
GGAATCCAG AGGGTCTTTC TACCAGGAAG AAGTGCCCA GCTGCGTGGC CGCCGAGACC ACGGGGAGG TGATCTGGTG  
GGACAAAGT TCCGTCTGCT CCGAGTCAG GAGATCGAGT CTC

SEQ ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGGCAGG ATGGGGCTGG GAAGTCCAAC CCCACGCATT TGGGCTCAGC CTTGGACATG GAGGCTGAC AGCTGTGTG  
CTTGGGGAT CC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGNCAC AATGCANCAT CTNATACAC GTTGCTTAAC CTAGAANCGT GGCTCCACCG TGAATTCTAA  
TTGGTCCGTG CTATCGAGGC ACTGTCCCT TAACTGGTCT CGCTCCAGTG GCCCNACTG CTTTCTTCC TCTTCCAGNA  
ATGGCTCTTC GGGCCAGAG TTGAATCTC GCGATCGGA TGGGACGGA GTACCGGCT GGGGTGTCCC AGAGCCGGA  
CTGAGCTGGG GAGTCAAGAC CTCGGGCGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTTCTTCCC CAGCTTCTCC  
TGCTCCAAT CTGTGGGT CTGGGGTCT TCGTCTTCC AGCGGGTGG AGCTGCTGGT GGAAGATCC TCCCAGGATC  
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

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ATGTAATACA GTGTAGAAAG CGATCATGTC ATAAGCAATG ATTCTGTACA ATCATNCNGC AGAAAATTAG TTTTGGAGAA  
 TTCTTGGTAA TTGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGTGCTTAC AATTTCAGG GATYCTTTTC  
 TTTTTCAAAG ACCCAAAGAY ACGTGGTTCAG AAAAAMAAAG CTTGAAGTCT CAATGCCTAA TGTCGTGCAC ATTKNACAGG  
 GAGGC

SEQ ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGTTTTCGAA GATGATGGAA CATCCCATAA GCCCAGGTGT GCAGCTAACC TTTAGAAGCT GGAAAAGGCA AGGAAACATA  
 TTCTGTAGAG CCTCCAGAAG GAACACACGT CTGCACACAC TTTGTTTTTA GCTCAGTGAA ACTGATTTTG GACTACTGAC  
 CTTCAGAACT GTAAGATAAA TTCTGTGTGT TTTACGTTTG TGGTGTATA GAAGTTACAG AAATGAATAT ACTTACCGTA  
 GTTTAGAGAG AGATGGGAGG ATACTTTTTT TTCTCCCTTC TTTTGAAGG GAGGTAGGTC TCCTTAAGTC CAGAGGAAAG  
 ACTGTCTTT CTTCATATAG GGGCCCTTTC ATTCTTAATT CATGGGAGTT GTTTAGGAGA TTGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CCTGAGGGG GACCATCATG TCGGAGACCG CATTTGGTGA GGTCACACC CACAGCCCAT GCCCAGCCTC  
 CTCGAGACTC AGGTCATCCA GCTGGTCGAT GGCTCTTTC ATACCTGGTG CCTCTCCTC TCGGGCTTGG CAGGCTTCTC  
 TGGGGGCTTC TCAGATGACT CTTTTCCTT CTCTCTGTC TTGGCTAACT CCTGGCCAG CTCGAAAGT GCCTCCTTGG  
 CTCCCTCTTC TACCACCTCC TCCCGTTTGG CCAACTTGCT CACGGCGTC TTGGTAGTGG CTTTGAGGCT CTCCTTGCTA  
 TCAGCCCGCT GTTGATTTT GCTGGGCTG AGGTGGTAG GCACAGCCCC AGAAGCCAGG NCCTTCTGCG TGGCCACAGG  
 GTAACGCAGG AAGTCCAGAT GCGAAGCTT TTCTAGGCC TCCAAGATCT TGTMTGGG AGCATTTCTT GGAAAAGCA  
 CACGCACAAT CTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGGAGATC  
 TCAGCCCTCT TCCCATGGG CAGCAGATG CCTGINTTG CTTCATATT GCCTGCCAC TTTTGCATGA GGAACATCAT  
 CTCTTGCTG TCCTTGACAG GGTGAGGAC ATACATGTC AGCGGCCCA CACCATTTT GTGAAGAGG GTCAGTGGCT  
 CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCTG GATGCCAGG CGGTTTAAGT GCTGCAGAGT GAGGCGGCC  
 TCTCAATGC TACGCTTGGC TTTCCGGGAG GCATCAGGAA GCCGAGCTT CTCAGGCAG TTGAAAAGA CAACCTCAAG  
 CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAAGT CTAGAGCCCT GGNACTGCTC CTCCTCTAGC TCTGCCACTT  
 TGCGCTGCAG TAGTCCATTG ATGCTGGCA GGTGTCTGC CCCAATGTGT GTNAGTAGCA CCGAGTCAAT GCGGTCCAAG  
 TNCCTTACCA GCTTCCAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATTGA CAGCAAAGAG  
 GGCAGAGTCC CCAGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGGAGA GCTGAGGAA GCCCCTGAG GTGGGGGGCT  
 CTAGTAGGTC AAATGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCACGCGTC CATGGTGGGC  
 AGAGTGGGCT CAGGGTTTAG CCGGAGGTGC AGGGTCTCTT GGGAACTGGA TAATCCAGG TGGCTCCAAT CACCTTCCCC  
 TAAGCAGGAC ACGGTAAGGA AGGCTGTAT CCCAGGGTCT CTATGCTGA GCAATTGGGA AATCTGGGG TTGTGAAGGA  
 CCTGGGCAAA GTTTTCATAT GAGTAGGTGC CACTCTGTAG GATGAGGTCT CCCCAGGCT CTAAACTTTG CCCACTCAAG  
 ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG  
 GATGATGCTC TTAGGATCT CACTCTGGTG GCAAAGGGTC CTCTG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT INTGCTCACT TCATGGGCTG GCCTGGAATT GACGATGGTG CAAACCCAAA TNATCCTGAT  
 GTAATTNATG AAGATTATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCCACAGA  
 CGTCACTGAT AAAACCGGTC GGGAACATCT CTGGTCTAT GCTGTGGTGG TGATTGCNTC TGTGGTGGGA TTTTCCCTTT  
 TGGTAATGCT GTTTCINCTT AAGTTGGCAA GACACTCCAA GTTTGGCATG AAAGGTTTTG TTTTGTTC TAAGATCCCA  
 CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGTG CTTGTGGT GATGCTGCCA TGTAAGCTGG  
 ACTCTGGGA CTGCTGTGG CTTATCCCGG GAAGTGCTGC TTATCTGGG TTINCTGGTA GATGTGGGCG GTGTTTGGAG

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GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACCTCTCA GGCAGCTAAG  
CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCTNITC TTACAGTAGT TCAAATACAA AACTGAAATG AAATCCCAT  
GGATTGTACT TCTNINCTGA AAAGTGTGCT TTTTGACCTT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAAAA  
TTGACCTGCA AAGTTAAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC ACACTGAATA GTCTAATCTA CATGTAACAC  
ATATTNNNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCGG CCCAGGTGGC CGCTGGCTGC TGAGCTCAGC CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC  
TTTGCTGCTG CTGGATGTTT GCTGGCTGCA GGTTCGTCTG CTGCATCTGT AAGTTTGTGT GCTGCACCTG CTGGGTCTGC  
ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGGTAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG  
GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGGAG GGGGCCCTGT TGCTCAGGGG GCCTGGTGCC ACACTCCCC  
GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCATT GACCATTCOA ACTGGTGGAC  
CCGNCACAG TGAAATTCAG GGGCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCACAG GCAGGTGGGA  
GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCCC CCACCCANCG CCGCCATYTC GGGCTTGGCC GCCACGTCA  
GGTNCNNAT GCCAGGTGG GTGTGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGACG GAGACTGCTG GAACGGGGAG  
GGCAGNAGT GCGGCGAGGC CACGTCTGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGCGAGA GCATGCCGA  
GCTGTCCAGC AGGCAGNCCT TCCGTCCTG GGACTTCTTC CTCGTGCTT TGAGGTCTT GGCTCTCTG CTTCACAGG  
CCAGGCCTTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGC TTGAGGCTGC CCAGGTAGCC GTTGGCGAG  
CAGAGCGNGG GCGACAGGGT GGGCGTGCC CCCAGCGGC TCCGTGCAGC TCGGGCTGC GCACCAGGT GTACTCGTCC  
AGCAGCCTCA CGATGTCTG ATGCATGCNC TCTNTGCGA TGTGCGCGG CAGGCGTCC ATATGATCCG TGATGTCCG  
GTTGGCAAAG TGGTCCAGCA GCACCTTGGC GGTCTGTAG CTGCCCTCCC GGGCGGCCAG AACAGGGGT GTCTCTCTCC  
TGTTGTCTG CATATCTTTG TTAGCCCGT TCTTCAGGAG CACAAGTGG GCATCCACAT TGTTCAAGC GCGCGCCAG  
TGCAGGGCG ACTTGCCAG GINATCTACG GCGTTGACGT CCGCGTGTA GTTGATGAGG TCTCCAGCA TGCCCTCCAC  
GGCCAGGCG GCAGCCAGG TCAGTGGCGT CGTGCCATCA TGCATGCGG CATCCAGTTC TGTGGCTCG TTCCGATCA  
GGATCTTGA AGACACCTT TCGTCCGCA GACACAGCC CATGCAGCG GGTGCGGCC ATGTGTCTT GGATGTTGGC  
ATCTGCGCTG GCCTCCAGCA GCGCTTGGC GGCATCAGAG CGTGAGTAG GGGCGGCCAG GTGCAAGGCG GTCTCGCCG  
TNCGTCTGT CTGGTGTGC AAGCTGGCG CCTGGTAGAT GAAGTGGAG ATGACGGCG GCGGTCTCT CTCCTCTCG  
CTGTGCCCC TCTCCAGGC GCGCCGCTG CAGGAGCGA TCATGAGCG GGTGAAGCCA TCAGGCCCGC GGACATTGAC  
GTCCATGCG TCGCGTCAA CCTCACCTG GGGCGGTGT GGGGCCATG CANACATCG CAGGTACAG GCATCCAGGT  
GCTGCTGAGT CCACTGCCG TGGTCTGTCT GGTCTGCCAG GTGAGGAGA ACCACGGGCT CCTCGAACCG GAACCTCTG  
GTC

SEQ ID NO:2421: (Length of Sequence = 1452 Nucleotides)

CCAGCAACTC AAATTCACCA CCTCGGACTC CTGCGACCGC ATCAAAGACG AATTTTCACT ACTGCAAGNT CAGTACCACA  
GCCTCAAGCT CGANTGTGAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CGTCACTATG TGATGTACTA CGAGATGTCC  
TACGCGCTGA ACATCGAGAT GCACAAACAG GCTGAGATCG TCAAAGGCT GAACGGGATT TGTGCCAGG TCTGCCCTA  
CCTNTCCAA GAGCACAGC AGCAGGTCTT GGGAGCCATT GAGAGGGCCA AGCAGGTAC CGTCCCGAG CTGAACCTTA  
TCATCCGACA GCAGTCCAA GCCCACCAGC TGTCCAGCT GCAGGCCCTG GCGCTGCCCT TGACCCACT ACCCGTGGG  
CTGCAGCCGC CTTCGCTGCC GCGGTGAGC GCAGGCACCG GNTCTCTCTC GCTGTCCCG CPTGGGTTC CAGGCCACC  
TCTCCAGGA AGACAAGAAC GGGCACGATG GTGACACCA CCAGGAGGAT GATGGCGAGA AGTGGGATTA GCAGGGGGC  
GGGACGGGA GGTGGGAGG GGGACAGAG GGGAGACAGA GGCACGGAGA GAAAGGAATG TTTAGACAA GACACAGCG  
ANTCTGGAT TGGCTAAACT CCCATAGTAT TTATNGTGGC CGCGGGCGG GCGCCAGCC CAGCTTGCAG GCCACCTTA

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GCITTCCTCC TACCCCATTC CCGGCTTCCC TCCTCTCTCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG  
GCAAGNTAAG GCTTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTCGC GAGGCARGCA AGCCCCNGCC  
CTTCCCCCGT TTTGAACATG TGTAAACGAC AGTCCTGCTG GGCCACAGCC CTCTCACCTT GGTACTGCAT GGACGNAATG  
CTAGCTGCCC CTTCCTCGTN CTGGGCACCC CGAGINTCCC CGACCCCGG GTCCACAGTA TGCTCCACC TCCACCTGCC  
CCACTCACCA CCTCTGNTAG TNCAGACAC CTNCAGGYCC ACCTGGTCTT CTNCCATCGC CCACAAAAGG GGGGGCACGA  
GGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGT GGGGACCCA GGATTCCTCC TCCCTTCCC AAATAAGAT  
GAGGGTACTA AAGTTGTCTT GGTTTTTATT TTATTATTAT TTTTCTTT TTCCAGTATA CTAGCTGTG TTTTAAGAA  
GGGATATTA AAAAAAAAAA AAAGACAAA GTGTTTTTAA AAAAAAGCAA CACCACACC TGGTGTCTGT ATATAGTCAG  
CTTATCTGT GTTCAATGT CTGATCTCA CAGAGAGAAG TGGAAAATGC TGTATCAAG GTGGGCTTAG CTGTGCCTTT  
CCAATAAGA TG

5     WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

10     or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

15     or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

20     SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

25     4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

30     5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.

6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.

35     7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.



8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.

5 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.

10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

10 SEQ ID NO: 316 - 2421;  
or a polynucleotide complementary thereto.

11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.

15 12. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1001-1500.

13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.

14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.

20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.

25 16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS 485, 650, 1834, 2073, 2092, and 2353.

30 17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions sufficiently stringent to require at least 97% base pairing.

18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.

19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.

35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.

22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.

23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.

25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.

26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.

27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.

28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.

29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.

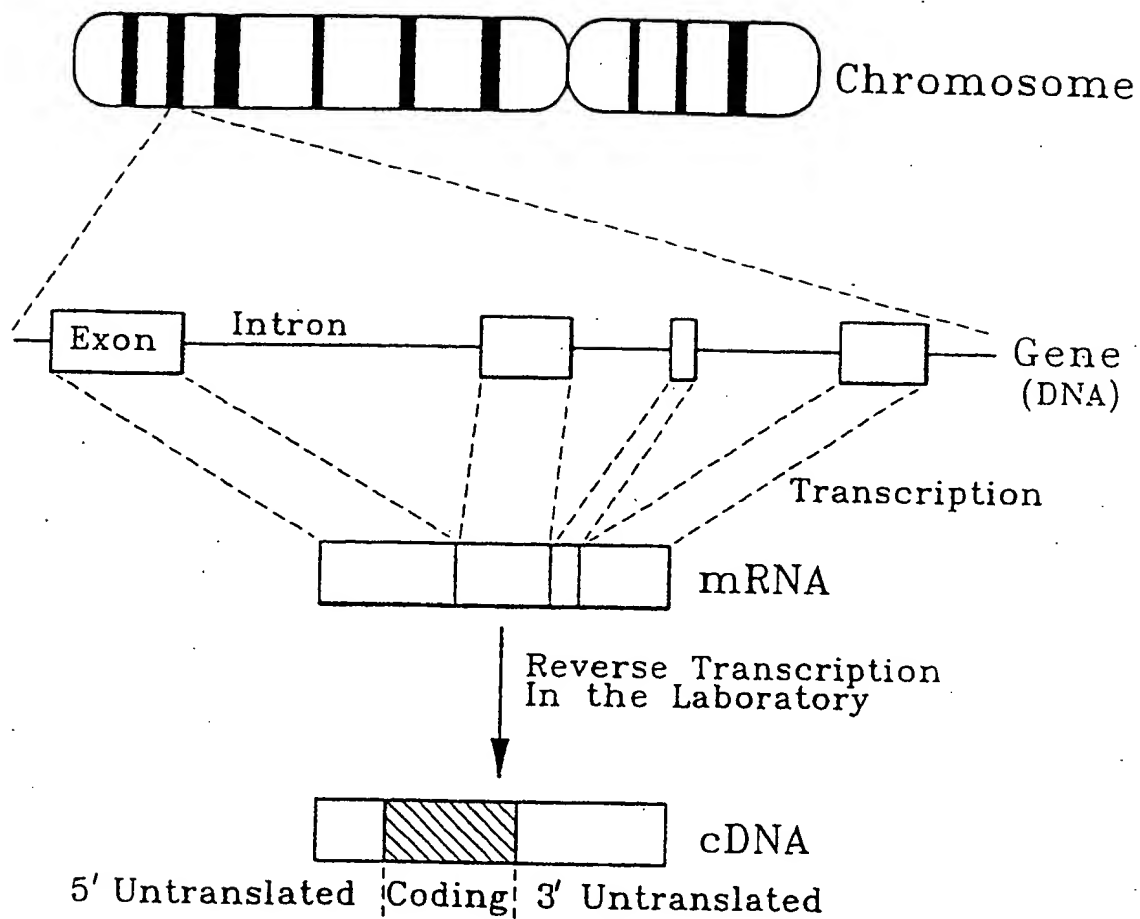
30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.

31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.

32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.

33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.

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**FIG. 1****SUBSTITUTE SHEET**





## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification 5 :</b> <b>C12N 15/11, C12Q 1/68</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 93/16178</b> <b>(43) International Publication Date:</b> 19 August 1993 (19.08.93)
<b>(21) International Application Number:</b> PCT/US93/01294 <b>(22) International Filing Date:</b> 12 February 1993 (12.02.93)  <b>(30) Priority data:</b> 07/837,195 12 February 1992 (12.02.92) US  <b>(71) Applicant:</b> THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US).  <b>(72) Inventors:</b> VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US).		<b>(74) Agents:</b> ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US).  <b>(81) Designated States:</b> AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  <b>(88) Date of publication of the international search report:</b> 25 November 1993 (25.11.93)
<b>(54) Title:</b> SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT  <b>(57) Abstract</b>  Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

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FI	Finland				

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 93/01294

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (If several classification symbols apply, indicate all) <sup>6</sup>		
According to International Patent Classification (IPC) or to both National Classification and IPC Int.Cl.5                      C 12 N 15/11                      C 12 Q 1/68		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched <sup>7</sup>		
Classification System	Classification Symbols	
Int.Cl.5	C 07 K                      C 12 N                      C 12 Q	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched <sup>8</sup>		
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup></b>		
Category <sup>10</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
X	SCIENCE vol. 252, 21 June 1991, WASHINGTON, DC, USA pages 1651 - 1656 M.D. ADAMS ET AL. 'Complementary DNA Sequencing: Expressed Sequence Tags and Human genome Projects' see the whole document ---	1-11,15 -23
P, X	NATURE vol. 355, 13 February 1992, LONDON, UNITED KINGDOM pages 632 - 634 M.D. ADAMS 'Sequence Identification of 2375 human brain genes' -----	1-11,15 -23
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><sup>10</sup> Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"A" document member of the same patent family</p> </div> </div>		
<b>IV. CERTIFICATE</b>		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
07-07-1993	22. 10. 93	
International Searching Authority	Signature of Authorized Officer	
EUR PEAN PATENT OFFICE	VAN PUTTEN A.J.	

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 93/01294

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos. because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos. because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos. because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see PCT/ISA/206 mailed on 12.08.93

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 15-23(part.)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.